

## The worst job ever

Collecting cormorant vomit  
for a good cause.

8

## Linguistic lock

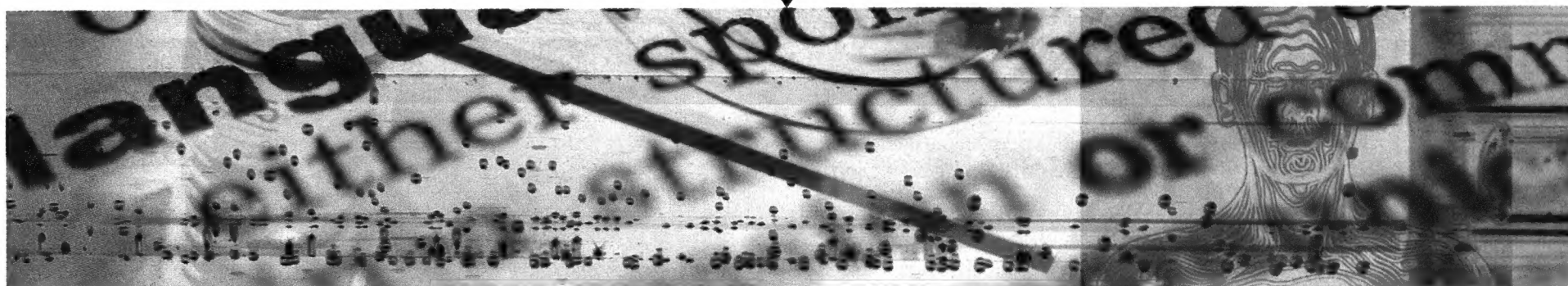
If language is thought, and one language becomes dominant in scientific  
and scholarly pursuits, are we limiting our knowledge?

3

## Tango entanglement

A U of A staff member shares her  
passion for Argentine tango.

9



UNIVERSITY OF ALBERTA

# folio

Volume 43 Issue 16

APRIL 13, 2006

<http://www.ualberta.ca/folio>

## Wharton shortlisted for world's biggest literary award

*The Logogryph* started as a "fun" project

By Richard Cairney

It was something of an understatement when Thomas Wharton was asked about making the short list for one of the world's most prestigious writing awards: "It's not a bad day," he said.

Wharton, a University of Alberta alumnus and creative writing professor in the Department of English and Film Studies, is one of 10 finalists for the prestigious Impac-Dublin Literary Award, worth \$140,000.

"It's stunning," Wharton said. His book, *The Logogryph*, published by Gaspereau Press, is one of 10 finalists announced last week. Greg Hollingshead, a U of A professor emeritus of English who won the Governor General's Award in 1995 for *The Roaring Girl*, was included in the original list of 132 nominees, for his book *Bedlam*, published by HarperCollins Canada Ltd.

Nominations for the award, open to novels in English or in English translation, were submitted by 124 libraries around the world. The prize winner will be named June 14.

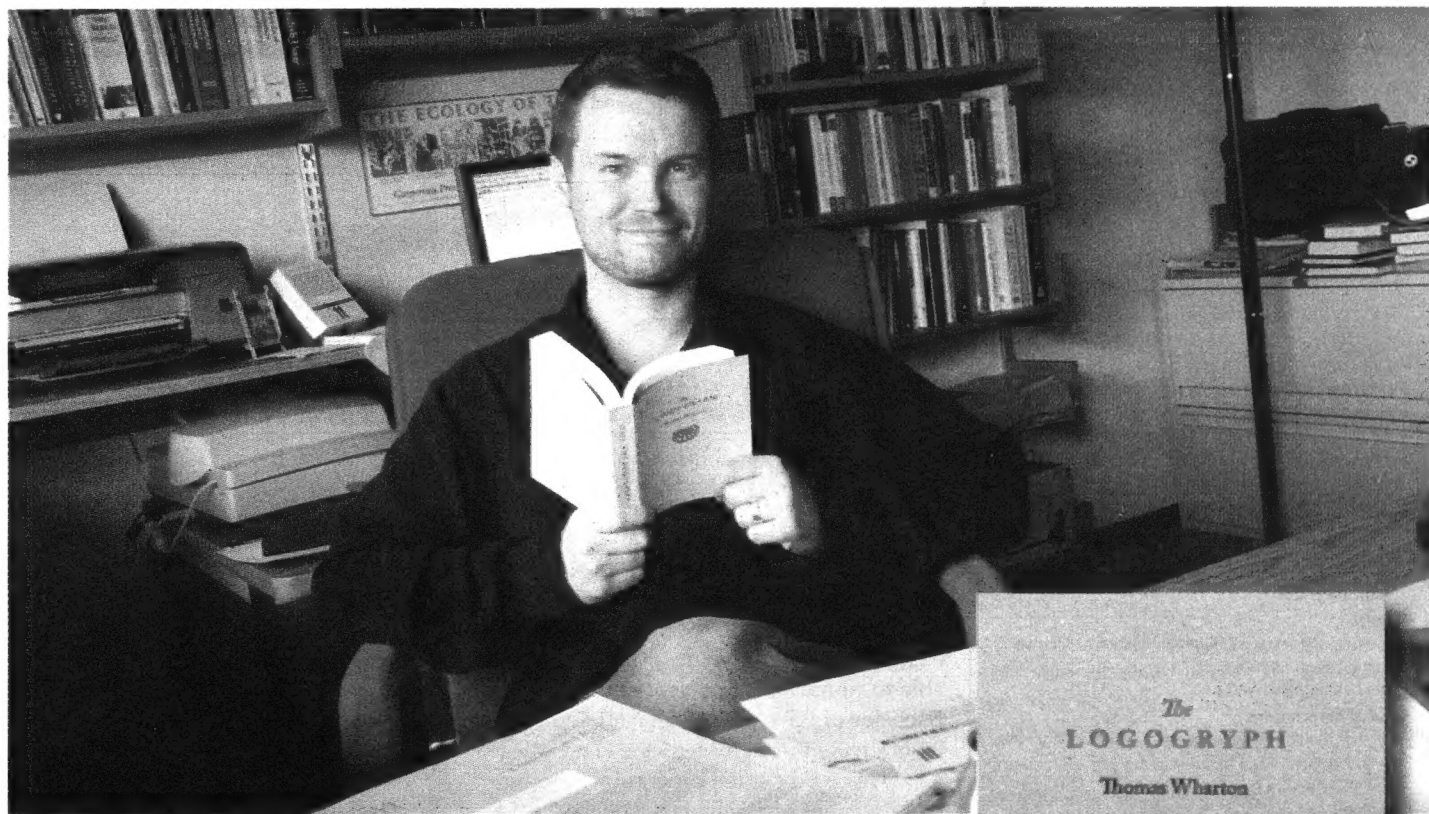
Wharton said he's somewhat taken aback by the success of *The Logogryph*. "It started out as a sort of fun project, it was originally going to be a limited edition 100-copies kind of book with Gaspereau Press," he said, adding that the work is neither a novel nor a short story.

"It is a hybrid. There is a story that runs through the book that crops up. A boy in Jasper falls in love with a family there and they become his mythology. He is fascinated by them."

Wharton said being shortlisted for a prize with \$140,000 is a bit nerve-racking. "I understand it is the biggest literary prize in the world," he said. "I don't want to think about it too much. It is one of those things – a castle in the air – it can suddenly disappear with a poof. So it is thrilling but there's lots to keep me occupied every day."

Simply being nominated in the first place was a thrill, he added.

"I was just amazed to be on the long



Creative writing professor Thomas Wharton was first named to the long list for the prestigious Impac-Dublin Literary Prize, with U of A professor emeritus Greg Hollingshead. Now Wharton is one of 10 finalists for the \$140,000 award.

list with Greg Hollingshead and his wonderful novel *Bedlam*, and there are names of writers on the list who I kind of think of as fictional beings – to be on a list with those people is wonderful, and I'm thrilled for Gaspereau – for a small press to have a book come into the spotlight like that."

Garrett Epp, chair of the Department of English and Film Studies, said the nominations for Hollingshead and Wharton, and Wharton's position on the short list, puts an international spotlight on the U of A.

"It's particularly nice timing since we've just had the second of our two 30th anniversary events for our Writer-in-Residence program and Tom was, of course, a writer in residence before he was hired here. So, it pushes that program neatly to the forefront and it puts our creative writing program that much more

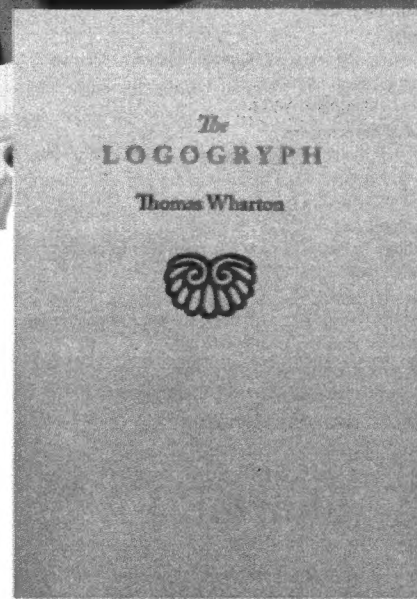
clearly on the map," he said.

"This is about as international an award as you're going to get," he added, noting that Chris Abani's *Graceland* was nominated by a library in Stockholm and its story is set in Nigeria; and that *Maps for Lost Lovers* was nominated by libraries in Brussels and Johannesburg and takes place in a Pakistani community in England.

"To have Tom's profoundly interesting book on this list is just lovely."

The 10 shortlisted books are:

- *Graceland*, by Chris Abani
- *Maps for Lost Lovers*, by Nadeem Aslam
- *Havoc, In Its Third Year*, by Jonathan Coe
- *An Altered Light*, by Jens Christian Grøndahl - translated from Danish



by Anne Born

- *The Swallows of Kabul*, by Yasmina Khadra - translated from French by John Cullen
- *Breaking the Tongue*, by Vyvyane Loh
- *Don't Move*, by Margaret Mazzantini - translated from Italian by John Cullen
- *The Master*, by Colm Tóibín
- *The Logogryph*, by Thomas Wharton ■



# Prairies are drying up

Region's returning to 'normal' arid state, research shows

By Phoebe Dey

The Canadian Prairies are facing an unprecedented water crisis due to a combination of climate warming, increased human activity and historic drought, according to new research by the University of Alberta's Dr. David Schindler, one of the world's leading environmental scientists.

"The western Prairies are worse than other areas of Canada," said Schindler, co-author of a paper published in the journal *Proceedings of National Academy of Sciences*, early online edition. "One of the referees of this paper said, 'wow, it's like looking out the window of the locomotive 10 seconds before the train crashes.' It is a very dire situation."

Although most global studies rank Canada among the top five countries in terms of per-capita water supply, those rankings can be deceptive, argued

Schindler and Dr. Bill Donahue, who co-authored the paper. Canada's western Prairie provinces, for example, have an area of 2 million kms that lie in the rain shadow of the Rocky Mountains and, as a result, are the driest large area of southern Canada.

Little research has been done on the cumulative effects of climate warming, drought and human activity on water shortages. Schindler and Donahue found that the biggest threat was a combined one, made up of several ingredients. First, there is now considerable evidence that the 20th century, when settlers arrived, was the wettest century for at least a couple of millennia. What we think of as normal was not normal in the long-term. "Most earlier centuries had one or more prolonged droughts, some of 10 - 40 years," said Schindler. "So we should probably not expect a second wet century in a row."

A warmer climate is a second factor that will exacerbate any droughts. This new research shows there is already a decline in glaciers that supply water to our rivers, snowpacks are dwindling and there is higher precipitation evaporation. The western Prairies have already warmed by two to four degrees and this is expected to double by mid-century, the researchers argued in the paper.

Our rapidly growing population also means we are using more water for industry and agriculture, both of which are increasing as well. Some rivers - the Bow and Oldman in southern Alberta - are already oversubscribed, said Schindler.

Making it worse, we are destroying the features of our watersheds that protect these rivers, he said. "We drain or fill wetlands and destroy our riparian forests - all of the features that could help our landscape to retain the water it does get."

One reason this dismal situation has been underestimated is that previous analyses have considered total annual flow, which has declined only slightly for most rivers. Schindler and Donahue looked at summer - May to August - flows. This



Dr. David Schindler and Dr. Bill Donahue have published research findings that show the Prairies are returning to their normal, arid state.

is the period when human demand is at the highest for irrigation, agriculture and municipalities and when coldwater fisheries are vulnerable to high temperature and low oxygen.

Although reducing greenhouse emissions would have the greatest effects several decades from now, it would have little short-term impact, said Schindler. "We cannot replace the glaciers so our only alternative is to get very serious about water conservation and protection of the watersheds that supply our water," he said.

For example, it is imperative to use less water for agriculture through drought-

resistant crops or incentives for water conservation and to consider reusing water and low-flow devices as ways to conserve our supply. We should also consider if and where we want population and industry to increase, said Schindler.

"As we show, the less water available to dilute pollutants, the more water quality problems we will see," said Schindler, adding that parts of the southwest United States are currently experience water crises for the same reasons. "I don't think we want to face the same problems Los Angeles or Phoenix has, but they will come unless we start protecting our water." ■

ExpressNews

your online news source

U of A news  
every weekday...  
on the Web...

www.ualberta.ca/ExpressNews/

## folio

Volume 43 Number 16

OFFICE OF THE VICE PRESIDENT  
(EXTERNAL RELATIONS)  
OFFICE OF PUBLIC AFFAIRS,  
6TH FLOOR GENERAL SERVICES BUILDING  
UNIVERSITY OF ALBERTA,  
EDMONTON, ALBERTA T6G 2H1

RICHARD CAIRNEY: Editor

CAITLIN CRAWSHAW: Managing Editor

GEOFF MCMASTER: Assistant Editor

CONTRIBUTORS:

Bev Betkowski, Paul Boothe, Ileiene Byles,  
Richard Cairney, Phoebe Dey, Tom Murray,  
Zoltan Varadi

GRAPHIC DESIGN:

Marcey Andrews, Penny Snell

Folio's mandate is to serve as a credible news source for the university community by communicating accurate and timely information about issues, programs, people and events and by serving as a forum for discussion and debate.

Folio is published 20 times per year.

The editor reserves the right to limit, select, edit and position submitted copy and advertisements. Views expressed in Folio do not necessarily reflect university policy. Folio contents may be printed with acknowledgement.

Inquiries

Comments and letters should be directed to Richard Cairney, editor, 492-0439  
richard.cairney@ualberta.ca

Display Advertising

Deadline: Thursday 3 p.m. one week prior to publication  
Bonnie Lopushinsky, 417-3464  
bl5@ualberta.ca

Classified Ads

Deadline: Thursday 12 p.m. one week prior to publication  
Lorraine Neumayer, 492-2325

Talks and Events

Deadline: Thursday 12 p.m. one week prior to publication  
lorraine.neumayer@exr.ualberta.ca

Enter events online at

http://www.uofaweb.ualberta.ca/events/submit.cfm

ISSN 0015-5764 Copyright 2006



The University of Alberta maintains a database of all alumni. This database is used to send you news about the U of A, including Folio and New Trail, invitations to special events and requests for support. On Sept. 1, 1999, post-secondary institutions were required to comply with the Freedom of Information and Protection of Privacy legislation of the province of Alberta. In accordance with this legislation, please respond to one of the following options:

- ☐ Please keep my name, or  
☐ Remove my name from the Folio list.

Name \_\_\_\_\_  
Signature \_\_\_\_\_

No response means the University of Alberta assumes an individual wishes to remain on the mailing list.

## Education degrees move south

Agreement allows students to earn U of A degree in Medicine Hat

Medicine Hat College, together with the University of Alberta, announced a new agreement that will see an education degree offered in the southern Alberta city of Medicine Hat.

Students entering their third year of elementary education in 2006 are now able to complete a University of Alberta Bachelor of Education degree offered collaboratively through Medicine Hat College.

"This B.Ed degree program was initially a dream of Medicine Hat College," said U of A Faculty of Education Dean Dr. Fern Snart. "Based on an ongoing positive relationship between our Faculty of Education and MHC, hard work and thoughtful planning, that dream is becoming a reality that both institutions will be proud of."

U of A President Indira Samarasekera spoke enthusiastically about the initiative. "Our partnership with Medicine Hat College is a tremendous boost to Campus Alberta and our goal of increasing post-secondary access for Alberta students. The U of A is committed to connecting communities, and we are actively seeking new ways to involve more Albertans in higher education. This agreement with Medicine Hat College is an excellent opportunity to achieve these goals."

The agreement is extremely important for Medicine Hat College, said Dr. Ralph Weeks, President and CEO. "The impact for our school and community is significant, as students that would normally transfer to a



Dean of Education Dr. Fern Snart says degree-granting status for Medicine Hat College is a bonus for the U of A and the college.

larger institution to complete their education degree are now able to stay in Medicine Hat. This partnership also speaks volumes

to the quality of education offered at our college and the co-operation between post-secondary institutions in our province." ■





Richard Cairney

## Lost in translation

*Is the dominance of English diminishing the spread of scientific knowledge?*

By Zoltan Varadi

When Dr. Fakhreddin Jamali first came to Canada in the early 1970s – a “very green” PhD student as he puts it – he attended a taping of the Royal Canadian Air Farce. Although he was fluent in English, having been schooled in the language from an early age in his native Iran, Jamali couldn’t figure out what all the laughter was about.

“I understood nearly every word they were using, I understood what they were talking about, but ... to me they weren’t funny,” he recalled. “The reason was, you have to have the cultural background to understand the topics they were talking about, and that extrapolates to everything about the language.”

Now that Jamali has been immersed in Canadian culture for 30-plus years and is an established scientist and professor in the Faculty of Pharmacy and Pharmaceutical Sciences, founding president of the Canadian Society of Pharmaceutical Sciences, and editor of its online journal, the first in its field – well, one can only assume that today he doesn’t laugh at Air Farce jokes for the same reasons as the rest of us.

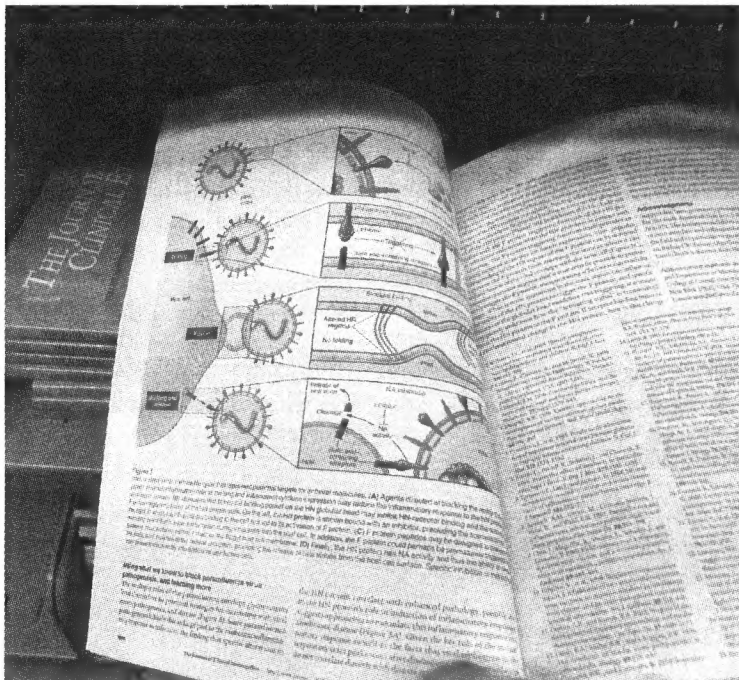
The context of his remarks comes from a discussion about English’s role as the dominant language of scientific communication (not to mention just about everything else in trans-global dialogue), and the side effects on careers and cultures when one mode of language and thought trumps all others.

“There have been distinct stages,” said Dr. Robert Smith, a professor of the history of science and mathematics, who says that in the pre-scientific world of “natural philosophy” Greek ruled the schools, then Arabic came to the fore, as the hub of scientific activity moved to the Islamic world. Latin followed, with German taking over by the 19<sup>th</sup> century.

“And then there’s a switch early in the 20<sup>th</sup> century, maybe even late 19<sup>th</sup> ... and the swing is towards the English language as the means of communicating science. And that comes really with the rise of the United States dominating science in the 20<sup>th</sup> century.”

Of course, the influence of the U.S. and other English-speaking nations extended further than scientific activity.

“Science and technology are just one part of the picture,” said Dr. John Newman, chair of the U of A Department of Linguistics. “The English language is closely associated with just a whole array of developments which have appealed to



Today’s major research journals are published in English but many researchers and journal editors feel that some important research may not be widely reported because of language barriers.

large numbers of people. English as the language of science is just one kind of appeal. It’s English seen as a gateway of a vast number of opportunities – industry, government, business, pop culture, international travel, education, et cetera. How can you argue against that? It’s just reality.”

Newman, who taught a science-German course back when both that language and Russian still held a limited sway in academia, agrees that, with such a reality, come cultural aftershocks. He cites the example of indigenous languages in Canada. Those languages are endangered as their speakers are pressured to use English in order to compete successfully in the commercial and cultural marketplace. The same sort of scenario can easily be extrapolated to fit the science-commerce-culture paradigm. Newman says of the estimated 7,000 languages that exist today, more than half could disappear over the course of the next 100 years.

“As speakers of those endangered languages become more aware of the dangers, then at some point they can place more value on their language,” he said. “And, so, they grow more resistant. At other times, unfortunately, they don’t anticipate the dangers and those first languages can get lost, forever. Usually people in that situation, in their discourse, make close associations between their language and their culture. It comes to be a core value of their culture.”

You don’t have to go to Canadian

indigenous communities or a language community in the South Pacific – Canada’s francophone community is an obvious example, he says.

“Even for native languages, there can be a similar sense about pride in their language and a kind of resentment about another dominant language. French, for example.”

Although such issues need to be addressed, there are other concerns that need to be dealt with by scholars on all sides to ensure valuable scientific contributions do not go unnoticed. Smith points to historical examples of important astronomical work conducted in Sweden and Germany in the early 20<sup>th</sup> century that didn’t get the attention it probably deserved, as the research findings were published in their respective native tongues.

“There was work in Germany on the structure of the galaxy that was being done, which was often written in what was regarded as difficult German, so not that many people expended the labour to wade through those scientific papers,” he said. “It’s not that they’re lost forever so much as that they didn’t have as much impact as they otherwise might have done.”

Jamali says such occurrences are still commonplace, recalling two papers he received for submission to his journal, one from Cuba, the other from Spain, which combined good data with bad translations. In the former case, Jamali put the

time in to rework the piece while he sent the latter back to the authors expressing his concerns. Fortunately, the university from which it came had resources to facilitate the writing of research and grants in English, and the paper came back ready for a peer review. Jamali says such programs are indispensable not only for non-English speaking countries but increasingly for North American institutions which are coming to rely more and more on the “brain gain” of scientists from abroad joining faculties here.

And, he reiterates, the importance of a rounded education for both foreign national and students born-and-raised right here who often, unsurprisingly, find their work lost in translation.

“If you go ahead and do a five-year PhD and create good science, excellent science, the value of this is very limited unless it’s peer reviewed and published,” he said. “To do that you have to have a very good command of the English language. Where do you learn that? It’s not only the spoken word or putting a few words together – you have to use your creative writing skills to make an article that conveys the message effectively. That is why it is extremely important to support the learning part of it. I don’t call it liberal arts, but liberal learning. One has to be a citizen of the world to understand, to be able to convey the message, to communicate. That is where we need English or language arts to support that and make good scientists.” ■



## Boom-bust cycle teaches valuable lessons

*Alberta's present spending levels are unsustainable*

By Paul Boothe

The hardest time for politicians to be disciplined in spending is during a boom; in the mid-1990s all Albertans understood we were facing a crisis

Most Albertans are familiar with the bumper sticker that was popular when oil prices crashed in the 1980s: Please God, send another oil boom and I promise that this time I won't piss it all away. Well, we are in the midst of another oil boom. Are we keeping the resolution we made after the last crash?

Things have never looked better in Alberta. Everyone who wants to is working. People are moving here in droves. New homes are going up everywhere. We are building roads and bridges and hospitals like never before. Alberta is the envy of the rest of Canada. Indeed, political leaders in other provinces are beginning to talk about the negative impacts of Alberta becoming "too rich." It's a great problem to have.

Ideas on how to spend the extra revenue are also in abundance. We have protection against high energy prices, massive increases in capital spending, one-time \$400 rebates, cancer funds, bone and heart institutes ... you name it, we want it.

In fact, when you add it all up, in the past five years we have increased program spending by about 46 per cent. Over the

same period, our population grew eight per cent. Much of the money went to health spending. Health spending has grown by about 70 per cent in the past five years.

That said, the province is still running big surpluses, so why go looking for trouble?

Unfortunately there is good reason to be concerned. First and foremost is the fact that, at least for government revenues, this boom can't last forever. Even if energy prices remain at these record levels – and that's a big if – we know that the energy revenues of the province are almost certain to decline.

The logic is simple. Alberta's energy industry is undergoing a profound transformation. As conventional oil and gas runs out, new, non-conventional sources like the oil sands and gas from coal are coming on stream. In addition, technology is being developed that will allow us to recover more oil and gas from existing conventional sources. That's all good news, especially for consumers. Unfortunately, royalties on these non-conventional sources and enhanced recoveries from mature fields are much lower than on the conventional sources they replace. To keep energy revenues where they are now, prices would have to continue to rise, setting new records every year. If energy prices decline

from their current highs, energy royalties to the province will fall faster and farther.

With energy revenues bound to decline, we need to be concerned about the rapid growth of spending. Today's high royalties are a temporary windfall even if energy prices stay high, so we can't count on them to support all the spending we are currently putting in place. We have to ask ourselves if today's spending will be affordable in future.

George Santayana told us: "Those who cannot remember the past are condemned to repeat it." Have we learned the lessons of past oil booms and busts? Government spending has become undisciplined. Over the past five years the government has overspent its budget by about \$1 billion on average. Last year it overspent by more than \$1.5 billion. In 2002, the Financial Management Commission recommended that we save windfall resource revenue over \$3.5 billion. Last year, we spent an extra \$1 billion of the windfall. This year we are projected to spend almost \$4 billion extra. The same Financial Management Commission recommended that we spend 0.9 per cent of provincial GDP on capital. In today's hot economy that equates to about \$1.8 billion. Current projections put this year's capital spending at nearly \$4 billion.

Even if some have forgotten the oil price crash of the mid-1980s, almost everyone remembers the massive deficits and corresponding government cutbacks of the mid-1990s. Many people took a five-per-cent cut in salaries. Literally thousands of public sector workers, like nurses and teachers, lost their jobs. Alberta experienced the most painful contraction of the public sector since the Great Depression. It was no fun and no one wants to do it again.

But that is exactly what we are facing. Even if energy prices remain at their current record level, continuing to spend at our current rate will put us back in deficit in the next four to five years. If energy prices moderate, we could be back in deficit within two or three years.

The dilemma for our politicians is that the hardest time to be disciplined in spending is during a boom. In the mid-1990s all Albertans understood that we were facing a crisis. Today, almost no one does. Correcting course now will be a real test of leadership. However, if we don't get back on track now, we will soon find ourselves right back where we started in 1993. Like Yogi Berra, the great baseball philosopher said "... looks like deja vu all over again!"

(Paul Boothe is a professor of economics at the University of Alberta. This article first appeared in the Edmonton Journal.) ■

## It's OK to talk to reporters

*Professor awarded Stanford fellowship in communications*

By Ileana Byles

Dr. Arturo Sanchez-Azofeifa is no longer a stranger to the media, but his first experience under the glare of the spotlight left him looking for a little guidance.

The professor of Earth and Atmospheric Sciences gained international attention in January when his work as part of an international research team proved for the first time that global warming is behind an epidemic wiping out entire frog populations.

"I think I did 15 or 20 interviews and it was a real eye-opener for me," said Sanchez-Azofeifa. "I didn't expect that kind of response – the phone just started ringing off the hook."

But Sanchez-Azofeifa's work and untapped talent for communicating scientific ideas has earned him a prestigious Leopold Fellowship. Based at Stanford University's Woods Institute for the Environment, the Aldo Leopold Leadership Program offers mid-career academic environmental scientists intensive communications and leadership training to help them deliver scientific information more effectively to policy makers, the media, business leaders and the public.

Scientists can often speak a language all their own, said Sanchez-Azofeifa, and don't necessarily know the best way to communicate the importance of their work. His trial by fire and support from media relations staff in his faculty and External

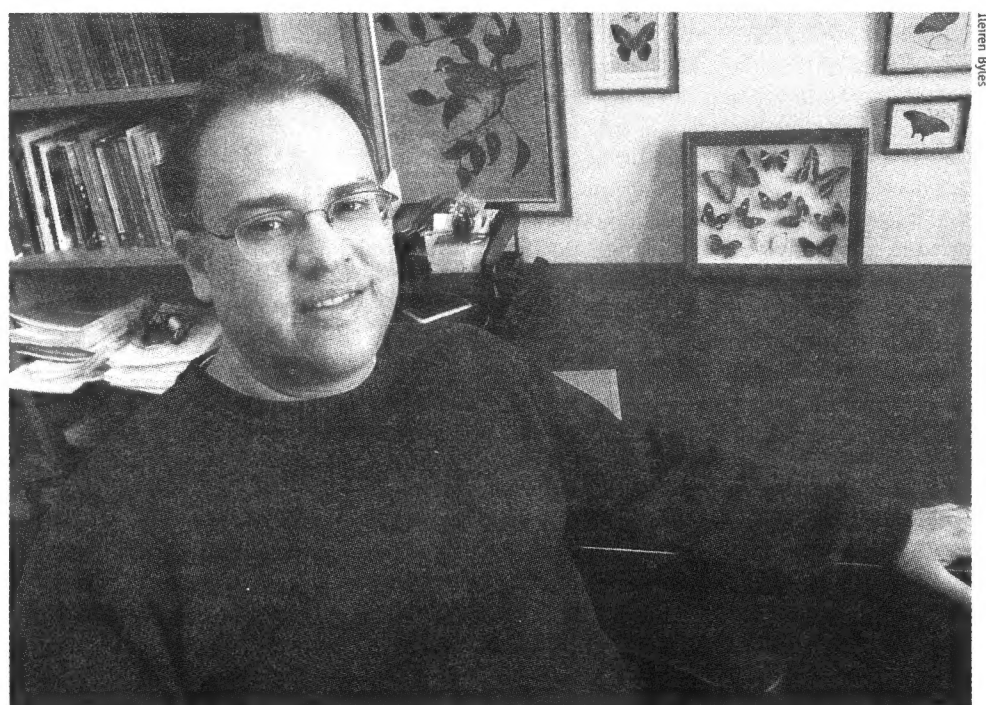
Relations gave him the basics of media relations 101 – keep it simple.

"I think I learned a lot from that experience," he said. "I know I have to try and bring the knowledge to a plain level and speak with plain language and you also need to stay very much aware of how news can be distorted very quickly."

Part of the work Sanchez-Azofeifa will be includes attending a session of Congress in Washington, D.C. "I think that's extremely important," he said. "You have to be able to communicate to those people who will make decisions and form policy," he said. "You have to be able to give them the facts they need to make the right decisions."

Sanchez-Azofeifa's current work revolves around 'dry' forests in South America, a topic he strongly believes the public needs more information about. "When you think of tropical forests in South America, what's the first thing you think of? Rain forests, right? But dry forests are the ones that grow on perfect land for golf courses and resorts and have the best agricultural soil. All 17 South American capitals are located on former dry forest land. It's the first frontier for development and the rates of deforestation of this kind of ecosystem are unknown."

Aldo Leopold Leadership Fellows are chosen for their scientific qualifications, demonstrated leadership ability and strong interest in communicating science beyond



Dr. Arturo Sanchez-Azofeifa has been awarded the Leopold Fellowship. Based at Stanford University's Woods Institute for the Environment, the program helps researchers learn to communicate scientific findings to government, industry and the media.

traditional academic audiences. Sanchez-Azofeifa is passionate not only about his research, but also the importance of letting the world know about scientific research. "I think that we need to talk. I think that we have a responsibility that goes beyond sitting in the ivory tower and looking down,"

he said. "I think that we have a strong responsibility to be proactive – not only at the community level, but also with the media."

Sanchez-Azofeifa is one of only two Canadians chosen in 2006 and, he believes, the first Latin-American Leopold Fellow. ■



# Immigrant families optimistic about education

Common barriers no deterrent, study shows

By Phoebe Dey

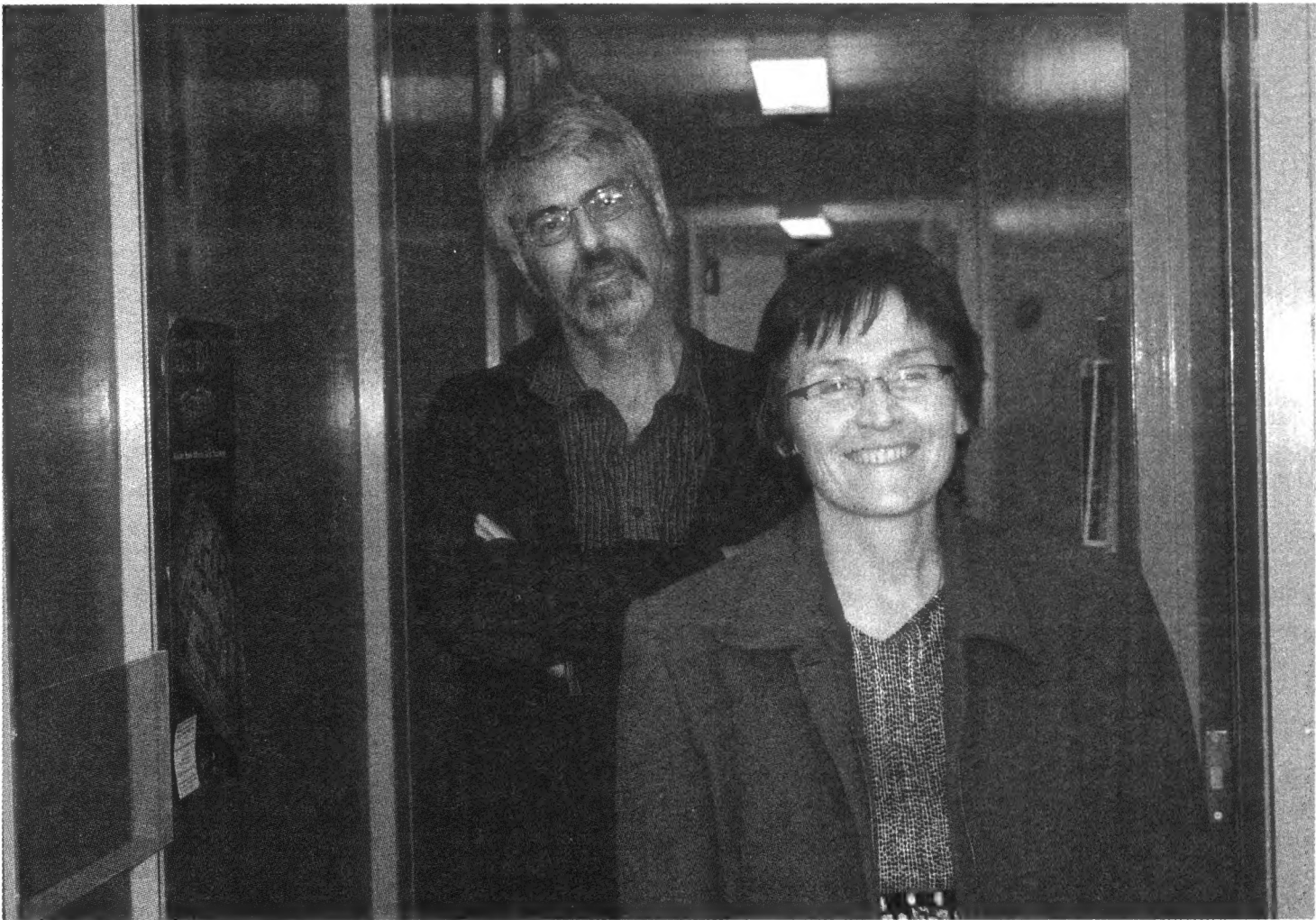
Visible minority youths are aiming higher when it comes to education largely due to educational values promoted from within their own families, according to new University of Alberta research.

Sociologist Dr. Harvey Krahn and Dr. Alison Taylor, from the Department of Educational Policy Studies, used Statistics Canada data from the Youth in Transition Survey to examine differences in the goals for post-secondary education among 15-year-old students. The research is published in the *Journal of International Migration and Integration*.

Previous studies have shown that immigrant youth try hard to be successful in the education system, and that their parents are aware of the need for their children to do well in school. But other research has shown that language and cultural barriers can stand in the way of immigrant youth. "It is possible that such barriers might dampen educational aspirations," said Krahn. "So we were surprised by just how resilient these young visible minority immigrant youth really were, despite such barriers, and by how much higher their aspirations were compared to those of Canadian-born non-visible minority youth."

Krahn and Taylor found that 79 per cent of visible-minority immigrant youth hoped to earn at least one university degree in their future, compared with 57 per cent of Canadian-born non-visible minority students. The study also found that the parents of visible-minority immigrant students generally have higher levels of education than their Canadian-born counterparts, and also express more positive hopes for their children's educational attainment.

About 88 per cent of visible-minority immigrant parents stated that they hoped their children would acquire a university education while 59 per cent of Canadian-born non-visible minority par-



Drs. Harvey Krahn and Alison Taylor have published research findings measuring a high level of optimism among immigrant visible-minority youths.

ents expressed the same goal for their children. Visible-minority immigrant students also tend to report higher grades and have higher levels of school engagement than Canadian-born students.

Krahn and Taylor found differences based on gender, region, community size and socio-economic status. However, first language and family structure were not found to be related to differences in the students' educational aspirations.

The researchers are now interested

in learning if visible minority immigrant youth encounter barriers in the secondary and post-secondary systems that dampen these high educational goals or whether they continue to persevere, said Krahn.

"Educators working with immigrant youth - a growing proportion of the school-age population - may, at first glance, see young people who may have language difficulties and are trying to find a way to fit into a new culture," he said. "While it is important to recognize these barriers they

are facing, we need to also recognize their unusually high aspirations and to make sure that they have every opportunity to reach them."

The analysis for this study was conducted at the University of Alberta Research Data Centre. The Research Data Centre program is part of an initiative by Statistics Canada, the Social Sciences and Humanities Research Council and university consortia to strengthen Canada's social research capacity. ■

# Debate over genetically modified foods essential

Subject draws black-and-white opinions

By Zoltan Varadi

The kind of awkward silence that can envelope university lecture halls during the Q & A portion of a presentation was one problem the organizers of *Hope or Hype? - Do We Need Genetically Modified Food to Feed the World?* didn't have to contend with.

Nor was there a rush for the catered spread waiting outside the theatre in which Dr. Channapatna S. Prakash of Tuskegee University, Alabama, presented a pro-GMO seminar, hosted in part by the University of Alberta's Department of Agricultural, Food and Nutritional Science. Instead, those in attendance at the public presentation wanted answers to their questions, or simply to voice their opposition.

"I think we could have kept debating for hours at length, and we could have sat there all night, because people come in with preconceived opinions and notions," said Dr. Nat Kav, a researcher in AFNS, a few days after the talk. "Or, in some cases, they may be unwilling to change those, so we could keep the debate going. But, on the other hand, there were also certain important issues that need to be openly discussed."

Prakash did a good job in making a positive case for genetically engineered crops, saying that "practically everything we do in agriculture is unnatural" in regards to the age-old practices of selective breeding and hybridization, and that the transfer of genes into crop plants is "more like a logical extension of those tools used in breeding."

Furthermore, Prakash cited an impressive list of benefits of the 'Green Revolution,' such as the prolonged shelf life of fruits and vegetables, extended crop areas and seasons, and increased stress tolerance for those crops. "The most important impact is when we make our crops hardier, especially against drought," he said.

That is the kind of work Kav is researching at the U of A, namely identifying genes that may be useful for improving crop tolerance towards drought, salience, and diseases. But, like Prakash, Kav concedes that the primary beneficiary of such developments would be the private sector - an overriding concern of the audience.

"The producer has a better guarantee that what he puts into the ground will germinate better if some of our research comes through," he said, adding, "but, if you look at the developing nations, let us say the highly saline soils in a country like Bangladesh or parts of India ... if you can take some of this and put some of these varieties into the ground there, you're talking about basic food production. And there it benefits humanity."

Both scientists believe - given the example of all previous technologies - that although large multinationals whose primary concern is profit, not philanthropy, will use bio-tech for commercial yields, eventually a trickle down effect will take hold, especially after patents expire and genetically modified foods become public domain. Still, neither offers up GMOs as

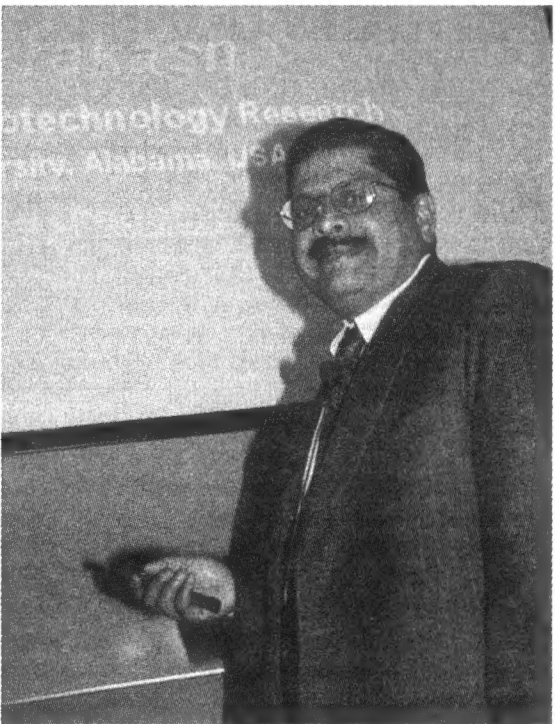
"The producer has a better guarantee that what he puts into the ground will germinate better if some of our research comes through. But, if you look at the developing nations, let us say the highly saline soils in a country like Bangladesh or parts of India ... if you can take some of this and put some of these varieties into the ground there, you're talking about basic food production. And there it benefits humanity."

- Dr. Channapatna S. Prakash

the solution to the world's food shortage problems, citing the socio-political factors that plague traditional resource distribution. And, they know the debate will continue.

"If there is a new genetically modified plant that is being considered for regulatory approval, we need to look at its toxicological safety, its safety to human health, animal health, safety to the environment and all those things need to be asked because they are valid questions," said Kav. "I don't think (Prakash) or I, or any responsible scientist would say genetic engineering is the

answer to all the food problems. No. What I would say comfortably is that genetic engineering is such a powerful tool with the potential to assist in solving some of those problems." ■



Dr. Channapatna S. Prakash of Tuskegee University, Alabama, presented a pro-GMO seminar, hosted in part by the University of Alberta's Department of Agricultural, Food and Nutritional Science. He cites a long tradition of genetic modification, as well as positive results, such as longer shelf life for food products.



# Toads tracked over hill and dale

## Western toad suffering setbacks

By Bev Betkowski

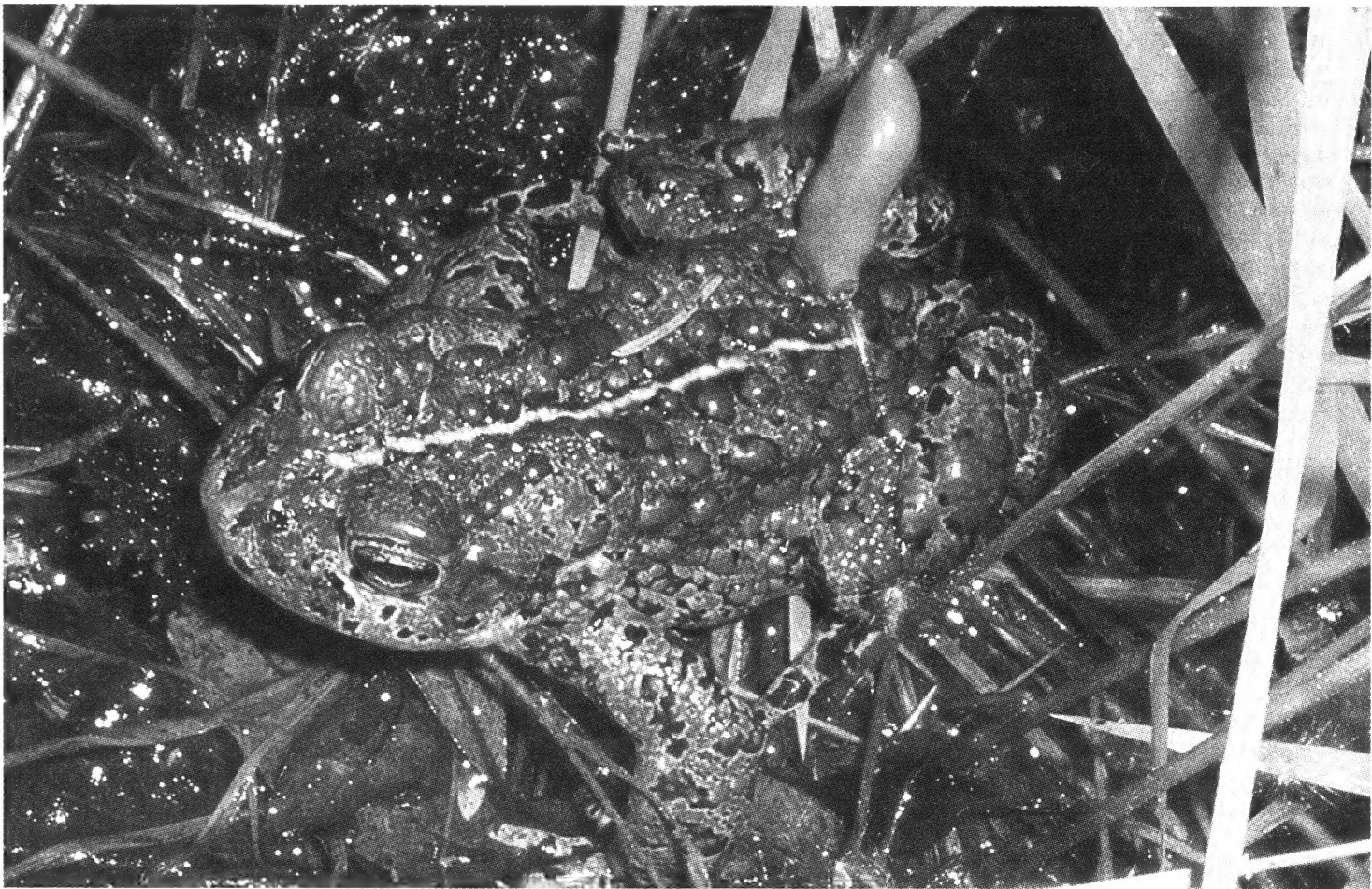
A University of Alberta researcher is working on ways to balance the uses of farmland with the needs of one of its most vulnerable residents, a declining species of toad. In a study that is the first of its kind, western toads are being followed through wetlands, forests, pasture crop and hay fields to track their movement patterns and habitat choices.

The western toad is one of many species that has experienced population decline in Canada and the United States and is in fact, the only amphibian species in Canada red-listed by the World Conservation Union as near threatened. Connie Browne, a PhD candidate in the Department of Biological Sciences at the University of Alberta, is researching the habitat of this bumpy-skinned creature to find out what habitat features it needs and what types of human disturbances they can tolerate. Habitat degradation is one of the suggested threats, and Browne has spent the past two summers literally in the field, watching the movements of the little toads by strapping radio transmitters around their bodies.

Working in the Lac La Biche and Strathcona County areas in Alberta, Browne has determined that the toads have different options for habitat – aspen and spruce forests, shrub swamps, fens, pastures and fields. Of the toads she tracked in 2004, most moved from pasture ponds into hay and crop fields during the summer, likely because the fields offered better shelter than pastures, which were heavily grazed by cattle.

“The fields, which were oats, barley, wheat and alfalfa-timothy, would provide more cover than pasture and more warmth than the forest, so they’d likely be able to grow faster in those areas compared to the forest,” Browne said.

But harvest time is proving deadly for the toads. Of the five toads Browne tracked to the fields, two were killed by machinery during harvest. Three others were spared, and after talking to the farmer harvesting the field, Browne knew why. “He said the hay was standing nicely so his blades were fairly high off the ground, but this isn’t always the case. When heavy rains knock the grasses down they must lower their



A western toad outfitted with a tracking device. PhD candidate Connie Browne is researching habitat conditions the toads favour.

blades to harvest it, likely at a level that would kill any toads in the field.”

Why are toads found in some agricultural settings but not others? Some areas likely have higher reproductive success due to high habitat quality through all life stages – breeding, foraging and hibernation – which can offset mortality at harvest time. But the loss of adult western toads is particularly harmful, Browne said. “They can live as long as 10 years and they typically have high mortality rates as young toads, but lower mortality rates as adults. If that rate starts to increase, it creates a large influence on the population. The reproductive success would have to increase greatly to compensate for even a small increase in adult mortality.”

The toads are beneficial to farmers because of the pesky grasshoppers and other insects they eat. “Protecting the toads

may lessen dependence on chemical sprays used for insect control.”

In her initial discussions with a few farmers, Browne said they seemed open to the idea of helping protect the toads. “Most of them don’t even know they have toads in the fields. A lot of them seem to want to do what they can to help. One even asked that we take our study toad out of a field before he mowed his hay so it wouldn’t be harmed. There’s a potential to work with farmers to protect these populations.”

Browne plans to head back into the fields around Edmonton this summer with a bigger sample size of 30 - 40 toads, which will be fitted with transmitters to track their movements. Browne wants to see if the toads move into the fields again. “If so, it indicates it’s a good area for them to be foraging, but I’m sure they’re not aware of the risk.”

She’ll pay special attention to how toads react when a tractor approaches. “If they lay flat, maybe the blades could just be set at a certain level to avoid hitting the toads. But if they panic and jump up, they might still be hit. Depending on how far and fast they can move and how quickly the tractor returns, it’s possible to maybe scare them out of the fields.” It may be possible to cut fields in parallel lines to chase the toads out rather than in circles which might chase the creatures towards the centre.

Whether farmers would be willing to change their harvesting practices is another question, Browne added.

“If we could manage agricultural land in a manner that maintains toad populations, then potentially, huge areas of habitat could be protected and restored for this species.” ■

# Farmers adapted to overcome mad cow crisis

## Fulbright scholar funs resilience reigns in rural communities

By Bev Betkowski

The BSE troubles that pervaded Alberta farmers after the U.S. border closed to Canadian cattle imports in 2003 may not have been as serious as was first thought, thanks to the ability of the farm community to cope, according to a University of Alberta researcher.

“Of much greater significance to (farmers) was the drought in 2002 and grasshopper infestations. I get the sense that 2002 was worse than 2003,” said Dr. Michael Broadway, a visiting geographer from Northern Michigan University who is spending a year at the U of A to conduct research.

“The BSE issue was portrayed as a disaster with billions of dollars lost in exports; one might have expected to see its effects felt more widely. But it turns out the changes were more subtle,” Broadway said.

Broadway received a prestigious Canada/U.S. Fulbright award and is using it to examine the impact of mad cow disease on the economic and social life of rural Alberta. This is the first study of its kind. He chose to focus on Barrhead, a major beef-producing community in northern Alberta. Of the farmers in that area, 58 per cent raise beef cattle.

He plans to spend the next six months visiting Barrhead weekly and analyzing his

“The BSE issue was portrayed as a disaster with billions of dollars lost in exports; one might have expected to see its effects felt more widely. But it turns out the changes were more subtle.”

— Dr. Michael Broadway

findings after that, but Broadway said his preliminary research indicates that while there were financial hardships, beef farmers for the most part managed to cope with the loss in income by selling land or other assets, taking out bank loans or finding jobs off the farm.

“I’m finding that people adjusted to loss of income by coming up with other ways of getting money. They adapted.”

Broadway is conducting numerous interviews with local farmers, bankers, agricultural suppliers, county politicians, mental health workers and other front-line community stakeholders in the Barrhead area to find out how they think the BSE issue has affected them.

Collectively, BSE didn’t cause as much worry as other factors such as drought and



Alberta’s farming communities have endured worse catastrophes than BSE.

insect infestations over the past few years, he said.

Though there is a lack of existing documentation to confirm what he is discovering, Broadway has heard from several community stakeholders, including farmers, that on an individual level, the economic strains of BSE caused domestic turmoil and divorce in families, and he feels more in-depth study is needed to further explore those social effects. “I’ve heard it enough to know it’s a concern.”

Beef farmers also expressed frustration at the government’s handling of the fallout caused by border closure, Broadway added. “The feedlots did well, but small producers who needed help didn’t feel like the government listened to them. If the borders were to close again, the policy implication next time

around should be, is there a better way to design a program that will help the producers who have been hurt?”

More serious economic effects of BSE could show up years from now, he added. “You may not see the full effects of this crisis for years to come, when farmers start to retire and they are still in debt, and so have less equity for their retirement.”

While the story of BSE impact has been told through reports quoting statistics, Broadway doesn’t believe the deeper story has been explored. “Lots of aggregate statistics have been thrown out there, but it’s my sense that a human face hasn’t been put on this particular problem. Does it matter that we are in danger of losing more farmers, losing the rural landscape? I would like to think it does matter.” ■



# U of A puts its best foot forward

## Step Out program raises funds for diabetes research

By Illeiren Byles

The University of Alberta is stepping up for the Alberta Diabetes Foundation's Step Out challenge.

And U of A Chancellor Eric Newell is hitting the pavement raising money and awareness for diabetes prevention, joining other high-profile Edmontonians in garnering support as they pledged to walk 10,000 steps a day.

"I'm the retiree, so I want all the senior citizens, all of us who are over 60 years old, to be putting their money here," Newell said, as he paced on a treadmill during 'ast week's launch of the Step Out campaign. Later, Newell described himself as an excellent participant for the program.

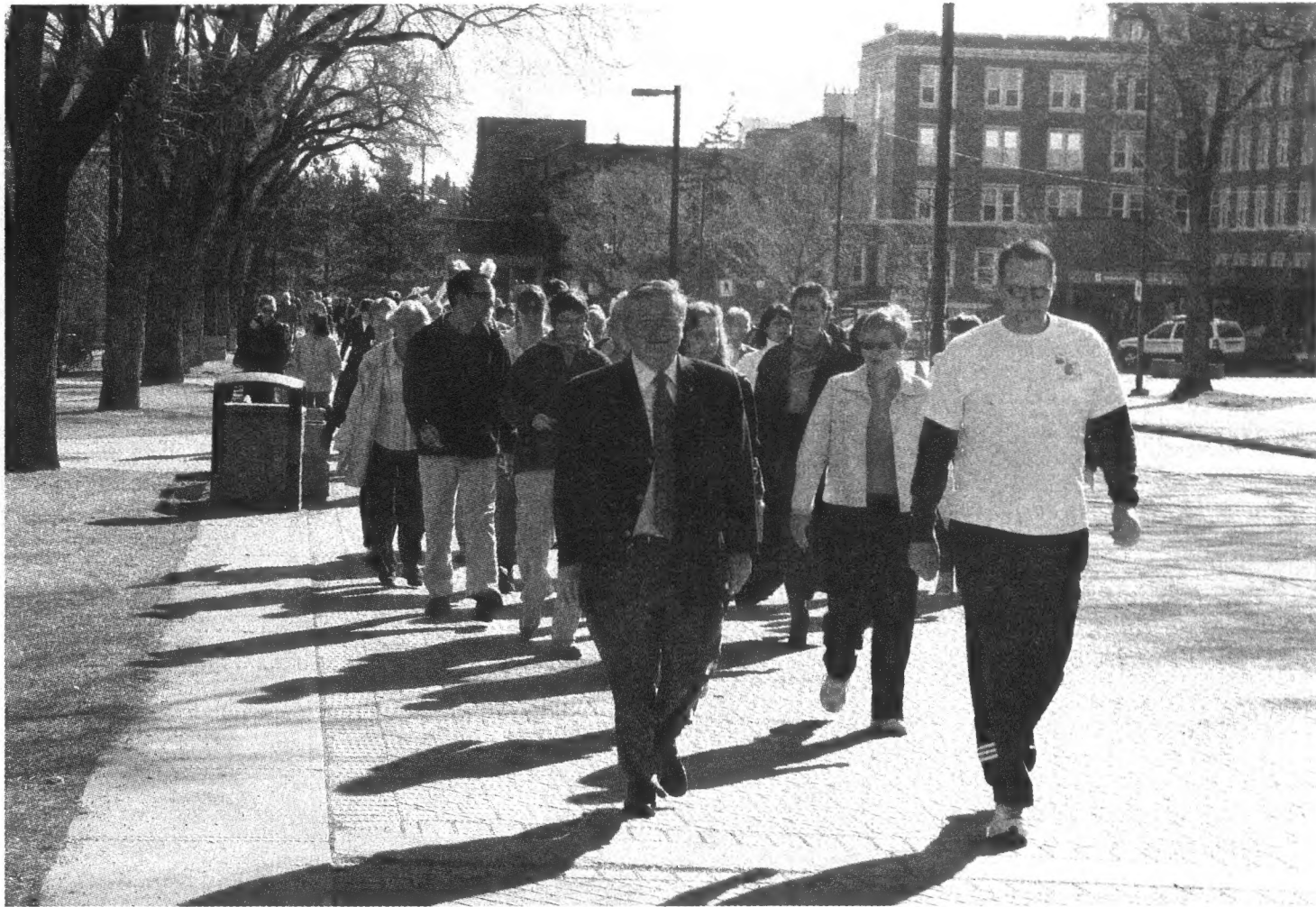
"I'm retired, I'm over 60. I'm short and a little overweight and I'm a perfect candidate for type-2 diabetes. Also, even though I have a great time as chancellor of the university, it's a pretty sedentary job and if I didn't do an exercise program I'd probably only get 3,000 paces a day."

Newell was joined by celebrity step-pers, including CTV news anchors Carrie Doll and Daryl McIntyre, Edmonton Sun columnist Graham Hicks, and Flaman Fitness operations manager Ted Dakin. Each will strive to walk 10,000 steps a day. The community can show its support by pledging donations to help their favourite stepper reach their fund-raising goals.

"You can go online and pledge your support to your local celebrity steppers at [www.afdr.ab.ca](http://www.afdr.ab.ca)," said Jeff Wright, a development officer with the Faculty of Physical Education and Recreation, one of Step Out's partner organizations. "But you could also choose to become a community stepper on your own and raise money in support of diabetes awareness and prevention by registering at the same website.

For \$30, registrants will receive a pedometer, a T-shirt, a bracelet and a tracking calendar to monitor their steps for up to two months. They'll participate in a U of A research study that involves tracking and reporting their steps, completing surveys and coming to the U of A for a free physical fitness assessment.

Step Out, a joint venture of the Alberta Diabetes Foundation, Flaman Fitness, CTV



University Chancellor Eric Newell and CFRN news anchor Daryl McIntyre lead a throng of supporters in a campus walkabout. Newell and McIntyre were joined by other celebrities in raising money and awareness for diabetes in the Step Out program.

and the Faculty of Physical Education and Recreation, has a four-pronged purpose, said Dr. Mike Mahon, Dean of the Faculty of Physical Education and Recreation.

"There are really four objectives to this campaign. One is to get people active, another, obviously, to raise money. Third, of course, to bring some attention and awareness to the valuable research being conducted in our faculty," said Mahon. "It also doubles – or quadruples – as a data collection opportunity whereby all those community steppers are invited to participate in a research project."

The data collected will go a long way toward furthering research in the faculty, said Mahon. "We're very excited about

the Step Out campaign and what it means for our faculty," he said. "We've had, of course, tremendous accomplishments across the U of A when it comes to diabetes research and Dr. Ray Rajotte's team on islet transplantation, but what we haven't done is bring enough attention to breakthrough research and discovery efforts in the Faculty of Physical Education and Recreation around the impact of physical activity on diabetes."

Newell seconded that point. "One of the real keys for us at the University of Alberta is we have tremendous research going on for the cure of diabetes, type-1 in particular, but equally important is the work on the prevention side," he said.

"So this is a very good test of the impact of physical activity, which will apparently reduce your chances of getting diabetes, type-2 diabetes, by one-and-a-half times."

A small amount of activity can go a long way, agreed Mahon. "The Canada Physical Activity Guide suggests at least 60 minutes of light activity every day, which roughly translates to 10,000 steps a day. So that's why we have our celebrity steppers aiming for 10,000 steps a day."

Mahon invited members of the U of A community to join Newell on April 10 for a Step Out on Campus Walk. "We're very excited about this event and we're hoping people will jump on board and get behind the campaign." ■

# Fatty acids could help kids with ADHD

## Diet changes might compensate for medication

By Zoltan Varadi

New research at the University of Alberta could lead to getting kids with attention deficit and hyperactivity disorder (ADHD) off their prescribed medications simply by changing their diet.

Ellen Ivity, a graduate student in the Department of Medicine and Educational Psychology, is researching how a potential deficiency in a certain strain of fatty acids could exacerbate the effects of ADHD. "Research with both animals and humans suggests that deficiencies in Omega 3 fatty acids may contribute to both the physical and mental symptoms that children (with ADHD) experience," she said. "So, what we're looking at is to see if the amount that they're eating correlates at all with any physical symptoms they may be experiencing, as well as the levels of Omega 3s that they have in their bodies."

Ivity said some existing findings indicate that children who've been taken off their medication and put on a diet high in Omega 3s, found primarily in flax seed and cold water fish - salmon, tuna, mackerel, sardines - show that the change in fatty acid intake does, "just as well, if not better,

than medication. Which is pretty amazing to hear families say that."

The problem seems to be that typical western diets are out of balance in favour of another fatty acid, Omega 6, which is primarily found in vegetable oil. "An ideal ratio would be one-to-one," Ivity explained, but she said some studies have found ratios of ten-to-one more common for Omega 6 to Omega 3, respectively.

"So what we're looking to do is, in a potential second phase, supplement the children to see if there are improvements in behaviour and physical symptoms. Ultimately what we're going with this is we'd like to find alternatives to medication, and the families would love nothing more. You put your child on a pharmaceutical from the age of five-plus ... families don't want to do it."

But first things first: stage one needs to be completed, and although it's already underway, Ivity still needs more subjects. She is only a third of the way there and hopes to recruit for the next two to three months.

Participants need to be children

"Ultimately what we're going with this is we'd like to find alternatives to medication, and the families would love nothing more. You put your child on a pharmaceutical from the age of five-plus ... families don't want to do it."

– Ellen Ivity

between the ages of six and eight, who've been diagnosed with any of the four types of ADHD. In this data-collecting stage of the study, parents who contact Ivity will first have a brief telephone screening to ensure their child meets the criteria, which is then followed up by an in-person interview. The children will provide a both a cotton-swab cheek cell and blood sample administered by a registered nurse. The samples will be used to analyze for deficiencies in Omega 3s.

Understandably, families who have participated so far have been quite interested by the prospects of Ivity's work, as both the disorder and the available medications used to treat it can cause serious

suffering. Symptoms of ADHD, besides hyperactivity and learning disabilities, include rhinitis, halitosis, headaches and night awakenings. Common side effects of Ritalin, the most commonly prescribed treatment, can be headaches, nausea and listlessness.

"The parents are finding that one of the main effects is that their child isn't the same - it dampens their effect, they're just zombies," said Ivity. "We've had people from Hinton, Fort McMurray, Beaumont, and Morinville come in to do the study. The families are very excited about it."

Parents who would like to have their child take part in the study can contact Ivity directly at 492-8463. ■



# Bird's upchuck protects its reputation

**Cormorants wrongly blamed for declining fish populations**

By Bev Betkowski

Fighting off hungry gulls for the privilege of studying bird vomit isn't a job for everyone, but a University of Alberta researcher's work is proving that one species of waterfowl – the cormorant – is being blamed unfairly for declining fish stocks.

By studying the regurgitated stomach contents of the double-crested cormorant, a duck-sized black bird native to North America, Suzanne Earle is showing that the bird may not be to blame for damaging fish stocks, as is commonly thought.

"It's unfair to blame cormorants for the decline of the fishery," said Earle, a master's student in the U of A Department of Biological Sciences. "There are definitely some important interactions between this species and the rest of the aquatic system but we don't have the data to say that cormorants eat walleye or pike in any great number at all."

Currently, Earle is focusing her work on several large cormorant colonies in the Lac La Biche area of northern Alberta, where commercial and sport fisheries have operated for decades. But a decline in fish stocks and a rise in the number of cormorants, which were once considered an endangered species in Alberta, have implicated the birds with the shrinking numbers of fish. The lakes in the area are home to at least 20,000 cormorants.

Cormorant numbers are on the rise across North America, particularly in the Great Lakes area, and have been since the early 1970s. These increases have been coupled with a rise in human-cormorant conflicts in areas where the birds are thought to be competing for valuable fish resources.

"The fact the birds are numerous isn't necessarily a cause for concern. However, any dramatic changes in population numbers, whether large increases or decreases, might provide an indication of a disruption in the natural balance of the system and should be investigated," Earle said. Because they have a diet of fish, some people feel the birds have contributed to a decline in fish populations, or are preventing species such as walleye from making a comeback. But analysis of the birds' stomach contents shows the birds dine mainly on yellow perch, not walleye or pike.

In addition, isotope analysis (carbon and nitrogen content) of the eggs, breast muscle tissue and feathers of cormorants is showing that, in the food web, the birds are occupying the same level as walleye and pike, which are also aquatic predators in the lakes. "The cormorants are showing very similar isotopic signals to the top fish predators, walleye and northern pike. The birds don't appear to be eating these fish, but they are preying on the same food



Suzanne Earle plugs her nose and digs for cormorant vomit (above) as part of her research. The birds (inset, right) are accused of devouring fish stocks at Lac La Biche, harming the local fishery. But Earle's early findings suggest the waterfowl aren't poaching the walleye and pike the fishers are after – they're dieting on the same food as the walleye and pike (inset).

source that the fish in the lake are – primarily small yellow perch."

Historically, population crashes of lake fish species have been linked to over-harvesting. In recent years, the fish community in Lac La Biche has become dominated by an abundance of perch. Earle's research suggests cormorants are opportunistic predators and simply eat whatever is most abundant in the lake. Monitoring the birds' diet, and that of other fish-eating waterfowl, may provide an indication of important changes in prey abundance in lakes across North America.

Pursuing her research hasn't been the prettiest of jobs. Earle has waded deep into piles of guano, been attacked by gulls



and splattered with their excrement, and endured unbearable odour to study the partially digested meals adult cormorants deliver to their chicks. As the cormorants flee their nests to avoid the approaching researchers, the birds automatically throw up the balls of food they'd been holding in their stomachs to feed to chicks. Earle pops the half-digested bundles into plastic bags and packs them on ice for a trip back to the lab, all the time fighting off opportunistic gulls who want the fish samples for themselves – and are also extremely protective



of their own nests on these colonies. "They get you it right in the back of the head if you're not paying attention," Earle said ruefully.

Ultimately, by exploring the impact of cormorants on the lakes and the corresponding roles of fish and aquatic insects in the food web, Earle hopes to help find ways to address troubled fisheries and lake health. "If we can understand how the food web is structured, we can figure out what might be important for management of the lake." ■

## Chemistry professor earns Humboldt Award

**David Bundle's research shows promise in treating Guillain-Barre syndrome**

By Tom Murray

Dr. David Bundle sounds tired. Lately the chemistry professor has been flying back and forth between Edmonton and Germany, where he and other researchers have been collaborating on a project involving different aspects of carbohydrates. Dry work to some, but essential. Bundle has recently been awarded the prestigious Humboldt Award – from the non-profit German foundation of the same name – recognizing his continuing endeavours in this area.

The award recognizes lifetime achievement. The Alexander von Humboldt Foundation promotes international research co-operation, allowing scholars to spend extended periods of research in Germany.

"The foundation supports research in collaboration with German scientists," explained Bundle, who also serves as direc-

tor of the Alberta Ingenuity Centre for Carbohydrate Science here in Edmonton. "The centre itself has quite a reputation, and there's an interest in Germany about collaborating and building relationships on specific projects because of this."

It's a perfect fit, because a great deal of Bundle's research has been done in conjunction with European scientists, and it allows him to associate with experts in the field and keep up with the latest breakthroughs. It's also helped Bundle continue his fruitful collaboration with Hugh Willison, a neurology professor at the University of Glasgow in Scotland.

"I've been working with him for years to find a way to treat conditions that arise from a disease called Guillain-Barre syndrome," Bundle said. Guillain-Barre is a disorder characterized by the way it causes symmetrical paralysis and loss of reflexes,

usually starting in the legs. "It occurs after somebody's had food poisoning, and is usually associated with an anaerobic bacterium called *campylobacter*."

According to Bundle, the bacteria "expresses" carbohydrates on the surface that are similar to the carbohydrates on some of the body's nerve junctions, called gangliacydes. "Some of the patients who've had them develop antibodies against these carbohydrates. It's believed that these antibodies bind the gangliacydes that occur at nerve junctions. They impair the impulses, so you get paralysis, or in some cases death."

The disease is rare – the incidences are only about 10 in a million. "But for people who are infected it can mean severe death or hospitalization and intensive care."

There isn't much in the way of treatment for this disease. One option is to try

and remove as many antibodies as one can from circulation.

"This is rather crude," Bundle said. "Professor Willison and I decided we would try to find the simple carbohydrate sequences that were bound to these antibodies and allow us to remove them. We've identified structures that allow us to remove antibodies from patients."

On his most recent trip overseas Bundle met with Willison and two other researchers to discuss ways they could economically produce the carbohydrates these antibodies will bind to, along with a way in which to immobilize them on a solid.

"The idea is that you make a column through which you pass a patient's blood, remove the antibodies and then return the blood to the patient. It was quite the successful meeting – we've identified some preliminary research on how to do this." ■



## Tangled up in tango

*Argentine tango is poetry in motion*

By Tom Murray

Cristina and Vicente Munoz likely got more than they bargained for when they decided to seriously pursue their favorite dance.

The couple took up Argentine tango almost eight years ago, and since then they've shown off their footwork in front of thousands at various high-class functions, travelled to Argentina to learn at the "feet" of the masters, and began teaching the sultry dance in 2001.

"We wish we had started earlier,"

Cristina, undergraduate records co-ordinator at the Department of Biological Sciences confesses. "We liked to dance back in Chile, where we are originally from, so one day we decided to join a ballroom dancing course here. That was OK, but we didn't enjoy the North American tango they were teaching."

The differences are profound. The Argentine tango is improvisational in comparison to North American, and very sensual, while the ballroom tango, which rests on a series of formalized dance steps, is almost sanitized. In fact, practitioners of Argentine tango bristle at the misconception that they're performing ballroom dance. Argentine tango, it is said, is a conversation between two people.

"In Argentine tango you are more attached to each other – there is a feeling – and you express your feeling with your body and your feet. That's the difference – it's a way of expressing feeling," Cristina said.

Firm in their desire to find an Argentine tango teacher, the couple began checking with places like Arthur Murray for courses, but to no avail. One day, when Cristina was checking over courses at the U of A, she found a small card that offered the Argentine tango. A quick phone call confirmed it was indeed the dance they were looking for, and the couple signed on in a shot.

"We were very dedicated – if we missed one class we would phone and say we need a private lesson because we didn't want to be left behind."

Their desire to master the intricacies of their chosen dance was further inflamed when an instructor from the mother country – Argentina – showed up to help with the course. "He came with a partner and she was such a good dancer," Cristina recalls. "Both of them were very good dancers, and we were hooked." In November of that same year the couple

flew to Argentina to pursue their tango education in earnest.

"When we got there we thought OK – we have to take advantage of the time that we are here." With that in mind, the two signed up for a 1 p.m. dance class that lasted three hours, followed by others that would take them into the early evening, after which they would relax, dine and then retire for the evening. This disciplined program lasted them a week until the differences between Latin American and North American society were thrown into relief.

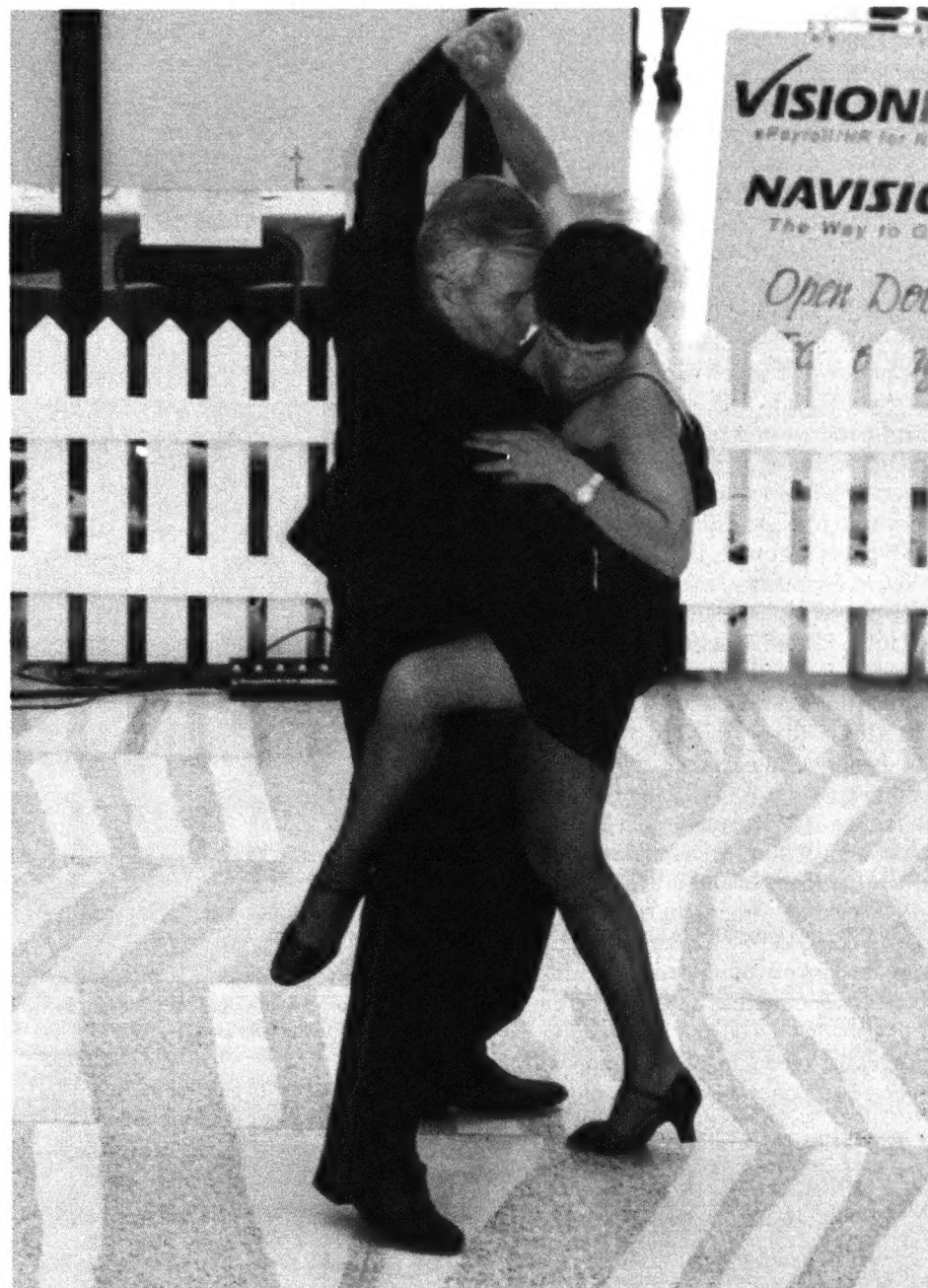
"One of our friends would phone and say 'what are you doing? It's only 11 – you have to take a shower, get dressed and we have to go party! We have to dance!' We would take off at 11 p.m. and come back at five in the morning. It doesn't take long to get into that routine."

The couple threw themselves wholeheartedly into this expected social schedule for a week, until one day Vicente went to sleep and didn't wake up until 15 hours later.

"He was very tired," Cristina laughs. "We go back every two or three years now," she continues. "Here you go to bed at 10, you're so disciplined, but there you start right away. You know that at 11, there will be many parties to go to."

The parties have continued back home in Canada. Since the couple took up tango they've danced at Heritage Days, the World Track and Field Championship festivities in 2001, and at a special concert celebrating the work of the great Argentine composer, Astor Piazzolla, at the Winspear Centre. And they're regular fixtures in Edmonton's vibrant Argentine tango community (<http://members.shaw.ca/tango-plus/home.htm>). Their proficiency at the dance was such that they caved into pressure from friends and acquaintances to spread around their knowledge.

"We never wanted to teach," Cristina said. "And we never even thought that we were going to be teaching tango or dancing in public. When we first started we were learning just for us; if there was an occasion to dance, fine, but that was it. But people started talking in town – 'oh, there is this couple from Argentina who dance tango very, very well, and there's going to be this function so we should invite them.' Everybody thought that we were from Argentina! From performing we go into



Cristina and Vicente Munoz teach Argentine tango through the U of A Campus Recreation and perform at cultural events around the city.

teaching."

Their classes, offered through the U of A Campus Recreation, are offered to beginners and advanced dancers. Though Argentine tango can be technically difficult, there are quiet moments in Argentine dance when it appears that nothing is happening, but everything is happening. the couple's teaching style is straightforward.

The classes turned onto a popular success, and the couple has continued to explore their interests in Latin American

culture with Tango Plus, an organization dedicated to that continent's music and dance – especially Argentine tango. Considering the amount of their life devoted to this art form, it's a wonder that they haven't decided to go all out and make it their life's work.

"Well, it's something that we both love, and it's something that we do together – which is important," Cristina adds, "but I don't think we'll ever do this professionally." ■

## Research cracks the whip on whiplash

*Rodeo athletes recover more quickly*

By Phoebe Dey

Rodeo athletes have often been called a breed of their own and now University of Alberta research looking into how they deal with whiplash injuries confirms it.

Dr. Robert Ferrari, from the U of A's Department of Medicine, has conducted several studies on whiplash and patients' expectations of recovery. Last year while on a radio talk show, he was explaining how Canadians have a worse outcome than those recovering from similar injuries in other countries. Since we're all anatomically built the same way, he said, the cultural expectations of injury and the way we treat them is part of the problem. One of the callers suggested looking at rodeo athletes because that group tends to incur significant injuries, yet have different attitudes about "getting back on the horse."

Ferrari, along with U of A Faculty of Agriculture, Forestry and Home Economics student Ashley Shannon and the Faculty of Medicine and Dentistry's Dr. Anthony Russell, investigated whether a group of rodeo athletes would report more benign outcomes to their motor vehicle whiplash injuries than a group of spectators at those events. The findings were recently presented at the Canadian Rheumatology Association meeting and published in the *Journal of Rheumatology*. Because many of the spectators come from similar backgrounds as the rodeo athletes the team wanted to learn if a difference existed between the two groups. About 160 rodeo cowboys and 140 spectators, were asked to recall motor vehicle collision experiences, the type of vehicle they were in, the presence of symptoms as a result and the

outcomes for those symptoms.

"What we found is that rodeo athletes recover faster and miss less work even though they shared the same occupation," said Ferrari, also a clinical professor at the University of Alberta Hospital. "It may be that athletes are physically more fit – although farmers and ranchers are as well – or it may be that athletes have a different attitude toward injury and they think the best way to deal with it is to just keep going. It may be a coping style that most people don't possess."

The vehicle types during the collisions and the occupation type at the time of the survey were the same for both groups. The duration of symptoms, however, was, on average, 30 days in rodeo athletes and 73 days in spectators. None of the rodeo ath-

letes recalled symptoms lasting for more than 60 days compared to 15 per cent of spectators who had symptoms more than 60 days. Rodeo athletes took no more than three weeks off work, whereas among spectators, it was common to take more than six weeks off.

"The lack of chronic problems with these athletes is a good reason to study them and understand why they don't have the same response and to see what we can learn from them," said Ferrari. "Now we're teaming up with a Calgary sports clinic to study injuries rodeo athletes deal with in their sport, including how they are able to continue working after being trampled by a bull. There is a fear of pain with activity in Western culture, but athletes don't seem to have it as much. We'd like to learn why." ■



# Honorary degree recipients named

**Artist, scientists, philanthropist among honorees**

The University of Alberta Senate has announced the names of this spring's honorary degree recipients. At Spring Convocation 2006, June 7-9, 12 and 13 at the Jubilee Auditorium, the U of A will confer nine honorary degrees to the following notable individuals:

## TOM JACKSON

Tom Jackson is an accomplished musician, actor, activist and humanitarian worker. An award-winning performer, Jackson is famous among Canadians for his character Chief Peter Kenidi on CBC's hit television series *North of 60*. He also starred in movies such as *The Diviners*, *Grizzly Falls* and *The Water Giant* and has been nominated for, and received, Genie and Gemini awards. As a musician, Jackson has recorded 13 albums, and two of which earned Juno nominations. Born in Saskatchewan on the One Arrow reserve and raised in Winnipeg, Jackson left school at age 15 and lived on the streets of Winnipeg for seven years. Committed to making a difference in the lives of the less fortunate, Jackson has had a significant impact on Canadian society through his humanitarian efforts. He created the Huron Carole Benefit Concert Series, an annual cross-country concert tour to raise money for the Canadian Association of Food Banks. He spearheaded and hosted the CBC Newsworld coverage of Say Hay, an event to raise funds for drought-stricken prairie farmers. Jackson also organizes the Dreamcatcher Tour, an annual tour to more than 100 reserves and urban locations, dedicated to bringing music and a message of empowerment to communities suffering the loss of young lives to suicide. Jackson was appointed as an Officer of the Order of Canada in 2000 and received the Queen's Jubilee medal in 2002. Jackson will be conferred an honorary doctorate of laws June 7.

## DANIEL KAHNEMAN

Dr. Daniel Kahneman, a Nobel laureate, is the Eugene Higgins Professor of Psychology at Princeton University and Professor of Public Affairs at its Woodrow Wilson School. Kahneman is a key pioneer of behavioural finance and prospect theory, which describes how individuals make decisions under conditions of risk and uncertainty. He was awarded the 2002 Nobel Prize in Economics, with collaborator Dr. Amos Tversky of Hebrew University (who died in 1996), for ground-breaking work integrating psychological research into economics. Kahneman earned his BSc in mathematics and psychology from the Hebrew University in Jerusalem in 1954 and his PhD at the University of California, Berkeley in 1961. He was a professor at the Hebrew University, the University of British Columbia and the University of California-Berkeley before joining Princeton in 1993. Daniel Kahneman has won numerous awards, including the Grawmeyer Prize in Psychology (with Amos Tversky) and the Hilgard Award for Career Contributions to General Psychology. He is a member of the Econometric Society and the National Academy of Sciences. Kahneman will receive an honorary doctorate of science June 7.

## MARTHA COOK PIPER

Dr. Martha Cook Piper, an outstanding educator and advocate for higher education and research, is the 11th president and vice-chancellor of the University of British Columbia (UBC). Piper received a BSc in Physical Therapy from the University of Michigan in 1967, a MA in Child Development from the University of Connecticut in 1970, and a PhD in Epidemiology and Biostatistics from McGill University in 1979. She was then appointed director of the School of Physical and Occupational Therapy at McGill University. In 1985, she joined the University of Alberta



Musician and actor Tom Jackson, Nobel laureate Daniel Kahneman and Alberta Lieutenant-Governor Norman Kwong are among this spring's honorary degree recipients. Spring convocation runs from June 7 - 13.

as dean of the Faculty of Rehabilitation Medicine. In 1993, Piper was appointed vice-president research, and in 1995 this portfolio was expanded to include external affairs. She assumed the presidency of UBC in 1997. Her teaching and research interests have focused on early identification of the developmentally delayed infant and assessment of specific approaches used in the treatment of physically and mentally handicapped children. The Martha C. Piper Research Prize is awarded annually to a faculty member at the University of Alberta. The 2002 Killam Lecturer, Piper's commitment to the advancement of research has identified her as a national leader in the university community. She has contributed to many national organizations, including the Canada Research Chairs Program and the Advisory Council on Science and Technology. Piper was named an Officer of the Order of Canada (2003), Educator of the Year by The Learning Partnership (2004), and a recipient of the Order of British Columbia (2005). She was also recognized as one of five Canadian "Nation Builders" in the *Globe and Mail* (2005). Piper will be granted an honorary doctorate of laws June 8.

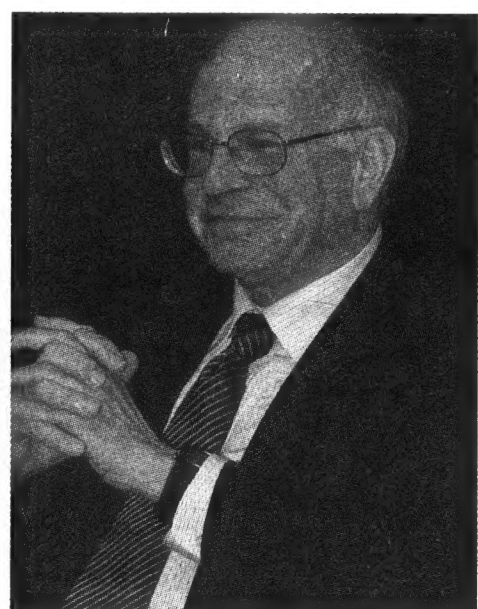
## THE HONOURABLE NORMAN L. KWONG

The Honourable Norman L. Kwong, Alberta's 16th Lieutenant-Governor, is well known for his outstanding leadership and involvement in our province. A former professional athlete, Kwong played for both the Calgary Stampeders and the Edmonton Eskimos. Nicknamed the China Clipper, he won four Grey Cups during his Canadian Football League (CFL) career and was the first Chinese Canadian to play in the league. He held more than 30 records when he retired from football and was named Canadian Male Athlete of the Year in 1955. He was inducted into the Canadian Football Hall of Fame in 1969, the Canadian Sports Hall of Fame in 1975 and the Alberta Sports Hall of Fame in 1987. He is also a past president and general manager of the Calgary Stampeders and the CFL, and he was a co-owner of the Calgary Flames in

1989 when the team won its first Stanley Cup. Since retiring from a player's role in sports, the Lieutenant-Governor has maintained an active interest not only in sports, but also in community affairs. He has served as Honorary Chair of the Easter Seal Campaign in Calgary and as the National Chair of the Canadian Consultative Council on Multiculturalism. He is a Member of the Order of Canada (1998) and is Chancellor of the Alberta Order of Excellence (2005). His Honour will receive an honorary doctorate of laws June 8.

## MATTHEW E. SPENCE

Dr. Matthew Spence, a U of A alumnus, served as president and CEO of the Alberta Heritage Foundation for Medical Research (AHFMR) from 1990 - 2004. He obtained his MD from the University of Alberta and his post-doctoral training at McGill University and the Montreal Neurological Institute, receiving his PhD in neurobiochemistry. AHFMR programs support a broad range of basic, clinical, health services, and population health research in Alberta. Under the guidance of Spence, the foundation expanded beyond its early biomedical focus to push the envelope of health research. AHFMR now funds more than 235 researchers in over a dozen faculties in three Alberta universities. As a passionate ambassador for health research, Spence also helped transform the Medical Research Council of Canada into the Canadian Institutes of Health Research. He chaired the committee responsible for developing the Alberta Government's new Alberta Foundation for Science and Engineering Research (Alberta Ingenuity Fund). He is a member of the boards of the Canadian Health Services Research Foundation, the Canadian Institute of Academic Medicine, and the Institute of Health Economics. A member of the Canada Foundation for Innovation, he serves on the Research Council of the Canadian Institute of Advanced Research. Spence will receive an honorary doctorate of laws June 9.



## CÉCILE E. MACTAGGART

Cécile E. Mactaggart, author, art collector and philanthropist, is an integral figure in the artistic and cultural life of the City of Edmonton and University of Alberta community. A long-standing supporter of public libraries, she is also a passionate advocate of the arts and educational institutions. She continues to contribute to the promotion of excellence in writing for both students and faculty through the Mactaggart Writing Award. Her unique gifts as an art collector are evidenced by a remarkable Chinese art collection, including paintings, calligraphy, scrolls, and silk robes, that is reputed to be one of the finest collections in North America. One of the newest additions to the University of Alberta's diverse research collections, this Chinese art collection will enhance the both the university and the city's reputation on the international stage and open new links with China. The collection will form the foundation of the U of A's new China Institute, an exciting initiative that will promote research initiatives in both Canada and China. The institute will offer undergraduates, graduate students and faculty tremendous opportunities for educational exchange in diverse areas of scholarship, including languages, trade, human ecology and history. Her visionary support for such endeavours stems from a passionate belief that the arts, education and travel are integral components of each individual's personal growth and every society's health and security. Cécile Mactaggart will be conferred an honorary doctorate of laws June 12.

## GWYN MORGAN

Gwyn Morgan, a U of A alumnus, is an outstanding leader in the petroleum industry and former president and chief executive officer of EnCana Corporation. Morgan is a mechanical engineering graduate of the University of Alberta, and he has post-graduate qualifications including the Executive Business Program of Cornell University in New York State. His



career includes over 35 years of technical, operational, financial and management positions in oil and gas exploration, production and pipelines. After stepping down as president and CEO of EnCana, he was appointed executive vice-chairman to EnCana's board of directors and also serves as the lead director of HSBC Bank Canada, a director of SNC-Lavalin Group Inc., and a member of the Accenture Energy Advisory Board of Accenture Ltd. In the not-for-profit sector, he is a director and a vice-chairman of the Canadian Council of Chief Executives, a director of the American Petroleum Institute, a director of the Institute of the Americas, and a member of the board of governors of The Canadian Unity Council and the board of trustees of The Fraser Institute. Morgan has been recognized as Canada's Outstanding CEO of the Year for 2005. He is the recipient of the Canadian Business Leader Award from the University of Alberta, the Ivey Business Leader Award from the University of Western Ontario, and the Strategic Leadership Forum

President's Award. He is an inductee to the Alberta Business Hall of Fame, a Fellow of The Canadian Academy of Engineering and an Honorary Colonel (retired) of the 410 Tactical Fighter Squadron, Canadian Air Force. Morgan will receive an honorary doctorate of laws June 12.

KENNETH L THOMPSON

Kenneth Thompson is well-known for developing the UNIX operating system, still widely regarded as one of the most powerful, versatile, and flexible operating systems in the digital world. He received a BSc in 1965 and MSc in 1966 both in electrical engineering from the University of California, Berkeley. He then joined the computing science research department of Bell Laboratories from 1966 until he retired in 2000. He developed the UNIX operating system in 1969 with colleague Dennis Ritchie. Thompson also developed the computer B language, a precursor to the C language, as well as Belle, a chess-playing computer designed in partnership with Joe H. Condon. Belle won the U.S. and World

Computing Chess Championships in 1980. From 1975 - 1976, Thompson was a visiting professor at the University of California, Berkeley and in 1988 he was a visiting professor at the University of Sydney, Australia. Thompson was elected to the U.S. National Academy of Engineering (1980); the U.S. National Academy of Science (1980); and named a Bell Laboratories Fellow (1983). He was awarded the ACM Turing Award (1983) and the National Medal of Technology for the development of the UNIX system (1998), along with Dennis Ritchie. Thompson will be awarded an honorary doctorate of science June 13.

WILLIAM S. FYFE

A Companion of the Order of Canada, Dr. William Fyfe is a Canadian geologist and professor emeritus in the Department of Earth Sciences at the University of Western Ontario. He is widely considered one of the world's most distinguished geoscientists and has contributed groundbreaking research on the environmental

implications of human energy consumption. Born in Ashburn, New Zealand, he received his BSc in 1948, his MSc in 1949, and his PhD in 1952 from the University of Otago. He pursued research at the University of California, Los Angeles and the University of California, Berkeley. He was a professor at Berkeley, Imperial College London and the University of Manchester before arriving at the University of Western Ontario in 1972. From 1986 - 1990 he was dean of science at the University of Western Ontario. Fyfe's numerous honours include: Fellow of the Royal Society and Fellow of the Royal Society of Canada (1969); Royal Society of Canada's Willet G. Miller Medal (1985); Geological Society of America's Arthur L. Day Medal (1990); Natural Sciences and Engineering Research Council (NSERC) Gerhard Herzberg Canada Gold Medal for Science and Engineering (1992); and the Geological Society's Wollaston Medal (2000). Asteroid (15846) Billfyfe is named in his honour. Fyfe will receive an honorary doctorate of science June 13. ■

talks & events

Submit talks and events to Lorraine Neumayer by 12 p.m. Thursday one week prior to publication. Folio Talks and Events listings do not accept submissions via fax, mail, e-mail or phone. Please enter events you'd like to appear in Folio and on ExpressNews at: <http://www.uofaweb.ualberta.ca/events/submit.cfm>. A more comprehensive list of events is available online at [www.events.ualberta.ca](http://www.events.ualberta.ca).

UNTIL APR 30 2006

**Step Out with Chancellor Eric Newell!** Join Carrie Doll and Daryl McIntyre of CTV News, Graham Hicks of the Edmonton SUN, Ted Dakin of Flaman Fitness, and our own Chancellor Eric Newell as they Step Out in support of diabetes research and prevention. These Celebrity Steppers are raising money and awareness in support of diabetes research and prevention initiatives being conducting in the Faculty of Physical Education & Recreation and the Alberta Diabetes Institute. Help support their cause as they challenges themselves to walk 10,000 steps per day, and raise 10,000 per day. You can show your support by pledging steps at [www.afdr.ab.ca](http://www.afdr.ab.ca). n/a . <http://www.uofaweb.ualberta.ca/senate/stepout.cfm>

APR 13 2006

**Nursing Rounds** Dr. Karin Olson: "Rethinking fatigue" Nursing Rounds is a weekly event. All faculty, students and clinicians are invited. Bring your lunch; soft drinks will be served. 12:00 p.m. - 12:45 p.m. Clinical Sciences Building 6-107. <http://www.nursing.ualberta.ca/homepage.nsf/website/nursing+rounds>

**Fulbright Lecture** The School of Native Studies hosts their first Fulbright Scholar, Dr. Jay Hansford C. Vest, University of North Carolina, Pembroke. Dr. Vest's talk is titled, "An Anglo-American Taking Narrative: Pocahontas, John Smith and the New World". Reception to follow in the KIVA (ED N 2-103). 1:00 p.m. - 2:30 p.m. ED 129 (Education South). <http://www.ualberta.ca/nativestudies>

**Ethical Decision Theory** Professor Wes Cooper Department of Philosophy University of Alberta 3:30 p.m. Humanities Centre 4-29. <http://www.uofaweb.ualberta.ca/philosophy>

APR 18 2006

**President's Breakfast Roundtable with Students** President Indira Samarasekera welcomes

students to join her for breakfast on April 18 at 7:30 a.m. The discussion will be conducted in a roundtable format to allow everyone to have the floor. This is an excellent, intimate opportunity for students to speak to the President about their experiences at the University of Alberta. Space is limited, so please sign up early. 7:30 a.m. - 8:30 p.m. Saskatchewan Room, Faculty Club, 11435 Saskatchewan Drive.

**Biological Applications of Magnetic Nanoparticles** Duane T. Johnson Associate Professor, University of Alabama Abstract: Research of magnetic nanoparticles has exploded recently due to their use in a number of exciting, potential applications. This presentation will summarize our work to date. Specific topics will include: the synthesis and characterization of new magnetic nanoparticles and particle dispersions, the surface chemistry involved in binding ligands to the particles, modeling the heat released by magnetic particles during hyperthermia treatment, monitoring the in vivo toxicity of the particles using C. elegans worms, and binding the particles to novel viral vector agents. 3:30 p.m. 2-001 Natural Resources Engineering Facility, Markin/CNRL . <http://www.uofaweb.ualberta.ca/mece/departmentseminars.cfm>

**Fifth Annual Women's Studies Lecture** Dallas Cullen, Chair of Women's Studies. "Memoirs of an Unrepentant Radical" Reception to follow in Tory 14-28 Everyone Welcome! 4:00 p.m. Breezeway 1 Tory Building .

**Recruitment Seminar** Dr. Helen Chamberlin, Department of Molecular Genetics, Ohio State University will present a seminar entitled "Life and death in C. elegans: conservation and evolution of gene transcriptional regulation". Dr. Chamberlin is a candidate for the Assistant/Associate Professor position in Molecular Genetics in the Department of Biological Sciences. Hosted by Dr. Dave Pilgrim. 4:00 p.m. - 5:00 p.m. M 145 Biological Sciences Building. [http://www.biology.ualberta.ca/news\\_events/](http://www.biology.ualberta.ca/news_events/)

**New Music Concert** New Music Concert featuring new works by U of A Student Composers 8:00 p.m. Arts Building/Convocation Hall .

APR 19 2006

**PHS Grand Rounds** Dr. Carl V Phillips, Associate Professor, Department of Public Health Sciences "A Novel Approach to Assessing the Risks from Smokeless Tobacco: Looking at the Evidence" 12 noon - 1 p.m. Room 2-117, Clinical Sciences Building. <http://www.phs.ualberta.ca>

APR 20 2006

**Walter Johns Alumni Circle** Fungal Friends and Foe The University of Alberta is home to one of the world's most important collections of fungi, including many associated with human and animal disease. Lynne Sigler, the curator of the collection, will discuss how fungi have an impact on our lives through their roles as pathogens, allergens, or as

promoters of plant growth. A New Strategy for Disease Diagnosis We've all heard of the Human Genome Project, which is a massive international effort. The Human Metabolome Project, which is based at the University of Alberta, hasn't received the same sort of publicity but its impact on disease diagnosis could be equally enormous. The professor behind the project, U of A alumnus David Wishart, will tell us why. 10 a.m. - 12:noon. Aon Boardroom Alumni House . <http://www.uofaweb.ualberta.ca/alumnieducation/nav01.cfm?nav01=14319>

**Nursing Rounds** Julie Nhan: Evaluation of the implementation of an anemia algorithm in chronic hemodialysis patients. Nursing Rounds is a weekly event in the Faculty of Nursing. All faculty, students and clinicians are invited. Bring your lunch. 12:00


Another Signature Project by

**ABBEY LANE HOMES**

[www.abbeylanehomes.com](http://www.abbeylanehomes.com)

# Park One

68 Avenue & 111 Street



- ◆ Steel and concrete building ◆
- ◆ Underground parking and storage ◆
- ◆ Air conditioning throughout ◆
- ◆ Maple and Granite Kitchens ◆
- ◆ Stainless steel kitchen appliances ◆
- ◆ Adult (18+) Building ◆

**Presentation Centre Open**  
68th Avenue & 111th Street  
Monday through Thursday, 2 pm - 6 pm  
Saturday and Sunday, 1 pm - 5 pm  
Call Karey Lear • Karey Lear Realty Ltd.  
975-8866  
[www.abbeylanehomes.com](http://www.abbeylanehomes.com)

*think* **Therapist Assistant**

**MacEwan**

The Speech Language Pathologist Assistant diploma prepares graduates to work in schools. Space is available in our internet delivered program. The combined Physical Therapist Assistant/Occupational Therapist Assistant diploma prepares graduates to work in hospitals, long-term care facilities, schools, clinics and home care. This program is available on-site at Grant MacEwan College in Edmonton.

*95% of our grads find employment within 6 months of graduation.*

**Find out more: (780)497-5098 or visit us on the web**  
**[www.MacEwan.ca/therapist](http://www.MacEwan.ca/therapist)**

Now accepting applications for September enrolment.

[www.MacEwan.ca](http://www.MacEwan.ca)



## Dr. Catherine Fletcher and Dr. Vincentia Aung

Welcome U of A employees and their families!  
We take the time to find out how you want us to serve you!  
Check us out and discover the difference for yourself

Extended hours available  
Booking appointments for Dr Aung, June 2006



**Dr. Catherine Fletcher, Family Dentist**  
#980 College Plaza, 8215 112 St.,  
Edmonton, AB, Ph: 439-2266  
Visit our website at [www.fletcherdentist.ab.ca](http://www.fletcherdentist.ab.ca) for more details



international  
friendship  
program

International Centre  
phone 492.2692  
[ifp@international.ualberta.ca](mailto:ifp@international.ualberta.ca)

Discover common interests together...

Simple as having coffee, watching a movie, or  
enjoying an outdoor adventure.

Get involved now! Visit our online registration  
form at [www.international.ualberta.ca/ifpvolunteer](http://www.international.ualberta.ca/ifpvolunteer)



UNIVERSITY OF  
ALBERTA  
INTERNATIONAL

## Fulbright Public Lecture

You are cordially invited to attend

Thursday, April 27 at 3:30

Room 5-40A, Stollery Centre,

Business Building

Reception to follow



Dr. Siva K. Balasubramanian,  
distinguished Fulbright Visiting  
Professor in the Department of  
Marketing, Business Economics and  
Law, will present a lecture titled:

Consumers' Perceptions of  
Genetically Modified Foods:  
A Research Odyssey.

Dr. Balasubramanian is the Henry J. Rehn Professor of Marketing, Southern Illinois University at Carbondale. His research interests include the management of innovations, marketing communications, and the application of advanced research methods. He has previously taught at the University of Iowa and SUNY-Buffalo. He is extensively involved in executive education programs in the US and other countries, and has presented his research at several universities in Europe, Asia, and North America.

For details, including an abstract, please go to  
<http://www.bus.ualberta.ca/mbel/fulbright.htm>



UNIVERSITY OF  
ALBERTA

Alberta  
SCHOOL OF BUSINESS



p.m. - 12:45 p.m. Clinical Sciences Building 6-107.  
<http://www.nursing.ualberta.ca/homepage.nsf/>  
[website/nursing+rounds](http://www.nursing.ualberta.ca/homepage.nsf/website/nursing+rounds)

**Curriculum & Pedagogy Institute Seminar:**  
**Haunting, Deconstruction and Curriculums of the Otherwise** Curriculum and Pedagogy Institute Seminar Series presents On Not Giving up the Ghost: Haunting Inquiry and Encountering the Other through Classic National Film Board Documentaries and the Curriculum. Presenter: Robert Nellis (PhD Candidate) Department of Secondary Education Refreshments will be provided. 2 p.m. 122 Education South Education Centre . <http://www.uofaweb.ualberta.ca/education/pdfs/CPIWinter2006rev.pdf>

**HOW PARTICLE PHYSICS CUTS NATURE AT ITS JOINTS** Professor Oliver Schulte Philosophy Department Simon Fraser University 3:30 p.m. Humanities Centre 4-29. <http://www.uofaweb.ualberta.ca/philosophy>

**Recruitment Seminar** Dr. Sarah Hughes, Department of Molecular Genetics and Cell Biology, University of Chicago, will present a seminar entitled "Linking polarity and proliferation: the role of the tumor suppressor protein Merlin". Dr. Hughes is a candidate for the Assistant/Associate Professor position in Molecular Genetics in the Department of Biological Sciences. Hosted by Dr. Andrew Waskiewicz. 4:00 p.m. - 5:00 p.m. M 145 Biological Sciences Building. [http://www.biology.ualberta.ca/news\\_events/](http://www.biology.ualberta.ca/news_events/)

**Inside/OUT 2005/2006 Speakers Series:**  
**The Downside of Pride** Inside/OUT 2005/2006 Speakers' Series Profiling LGBTQ-Related Work at the University of Alberta All meetings on Thursdays. Today's Presentation: The Downside of Pride. Dr. Judy Davidson, Assistant Professor Faculty of Physical Education and Recreation, University of Alberta A 'pride' focused lesbian and gay civil rights movement and its associated assimilationist politics is familiar to many of us. The presentation ends with a politically queer reading of how the Gay Games' melancholic incorporation might be productively disrupted. After the presentation we invite you to join us at the Second Cup (near Earl's on Campus) to continue to network and socialize. We also invite undergraduate students and interested members of the community to attend. For more information, please contact Kristopher Wells at [kwells@ualberta.ca](mailto:kwells@ualberta.ca) or Marjorie Wonham at [mwonham@ualberta.ca](mailto:mwonham@ualberta.ca) Funding and support for the Inside/OUT 2005/06 Speakers Series has been generously provided by APIRG, the Office of the Dean of Students, the University of Alberta Bookstore, and the Department of Educational Policy Studies. 5 - 6 p.m. 7-152 Education North Education Centre .

### APR 21 2006

**Myosin VIIa function in Drosophila hearing** Daniel Eberl, Department of Biological Sciences, University of Iowa is presenting a seminar on "Myosin VIIa function in Drosophila hearing". 3:30 p.m. M-149 Biological Sciences Building. <http://www.biology.ualberta.ca/courses/genet605/index.php?Page=399>

### APR 22 2006

**Music at Convocation Hall I** Music at Convocation Hall I William Eddins, piano Jennifer Gerth, clarinet Martin Riseley, violin Colin Ryan, cello Trio for Clarinet, Cello, and Piano: Nino Rota Miniatures: Benjamin Britten Contrasts: Béla Bartók Three Nocturnes: Ernest Bloch Trio in C Minor, Op 101: Johannes Brahms 8:00 p.m. Arts Building/ Convocation Hall .

### APR 25 2006

**Young Alumni Financial Education Seminar Series (1 of 3)** Take this opportunity to expand your knowledge of personal finances. April 25, 2006 Gain Control over your Personal Finances Learn how to budget for success and gain insight into effective debt management strategies. Pre-Registration Required (This is the first of three seminars, please visit our website for full details) 7:00 p.m. - 9:00 p.m. TELUS Centre for Professional Development . <http://www.uofaweb.ualberta.ca/alumnieducation/youngalumni.cfm>

### APR 26 2006

**PHS Grand Rounds** Guest Speaker: Dr. Tim Takaro, Professor, Simon Fraser University, British Columbia "Home Environmental Interventions in Childhood Asthma: The Seattle-King County Healthy Homes Project" 12:00 p.m. - 1:00 p.m. Room 2-117, Clinical Sciences Building. <http://www.phs.ualberta.ca>

**Edmonton Regional Alumni and Friends Reception for Mechanical Engineers** Join other

Edmonton-area University of Alberta Engineering alumni and friends of the Faculty as we pay tribute to all of you who carry on the great tradition of the U of A Engineer. 7:00 p.m. - 9:00 p.m. Solarium Engineering Teaching and Learning Complex (ETLC) . [www.engineering.ualberta.ca/alumni](http://www.engineering.ualberta.ca/alumni)

### APR 27 2006

**4th Annual PHS Research Day** Guest Speaker: Dr. Brian Leaderer, Susan Dwight Bliss Professor and Interim Dean of Public Health, Division of Environmental Health Sciences; Co-Director Yale Center for Perinatal, Pediatric and Environmental Epidemiology, Yale University "Air Pollution and Asthma Severity in Children: Do the Air Quality Standards Provide Protection?" 9:00 a.m. - 10:00 p.m. Bernard Snell Hall, Walter C Mackenzie Health Sciences Centre. <http://www.phs.ualberta.ca> .

**Dr. Eric Klann** "Mechanisms of Translational Control in Hippocampal Synaptic Plasticity and Memory" 12:00 p.m. - 1:00 p.m. 207 HMRC.

**Nursing Rounds** Dr. D. Lynn Skillen: Social transformation for global citizenship: Creating ripples Nursing Rounds is a weekly event in the Faculty of Nursing. All faculty, students and clinicians are invited. Bring your lunch. 12:00 p.m. - 12:45 p.m. Clinical Sciences Building 6-107. <http://www.nursing.ualberta.ca/homepage.nsf/website/nursing+rounds>

**Teaching with Writing Workshop with Toby Fulwiler** The Writing Task Force is sponsoring workshops for instructors from ALL faculties, programs, and departments. The workshops are an excellent opportunity to find out more about writing-intensive teaching, Writing-to-Learn, Writing-Across-the-Curriculum (WAC) and Writing-in-the-Disciplines (WID) from one of the world's leading experts. The workshops are free but registration is required. 2 - 5 p.m. 2nd floor solarium Engineering Teaching and Learning Complex (ETLC) . <http://www.arts.ualberta.ca/wtf/> .

**Fulbright Public Lecture** Dr. Siva K. Balasubramanian, distinguished Fulbright Visiting Professor in the Department of Marketing, Business Economics and Law, will present a lecture titled "Consumers' Perceptions of Genetically Modified Foods: A Research Odyssey." A reception will follow. 3:30 p.m. - 5:00 p.m. 5-40A Stollery Centre, Business Building. <http://www.bus.ualberta.ca/mbel/fulbright.htm> .

### APR 28 2006

**Teaching with Writing Workshop II with Toby Fulwiler** The Writing Task Force is sponsoring full-day workshops for instructors from all faculties, programs, and departments. The workshops are an excellent opportunity to find out more about writing-intensive teaching, Writing-to-Learn, Writing-Across-the-Curriculum (WAC) and Writing-in-the-Disciplines (WID) from one of the world's leading experts. The workshops are free but registration is required. 9 a.m. - 5 p.m. Prairie Room Lister Hall . <http://www.arts.ualberta.ca/wtf/> .

**Fatty Acid Desaturases: Agents for Cold Acclimation, Courtship and Molecular Defence** Department of Chemistry Visiting Speaker lecture presented by Professor Peter Buist, Department of Chemistry, Ottawa-Carleton Chemistry Institute, Carleton University 11:00 a.m. - 12:00 p.m. E3-25 Chemistry Centre.

**Curriculum & Pedagogy Institute Seminar: Haunting, Deconstruction and Curriculums of the Otherwise** Curriculum and Pedagogy Institute Seminar Series presents: Mourning After the Day before: Haunting, History, and Hope Presenters: Dwayne Donald, Yvonne Ellis and Robert Nellis (PhD Students), Department of Secondary Education All are welcome! Refreshments will be provided. 2:00 p.m. 122 Education South Education Centre . <http://www.uofaweb.ualberta.ca/education/pdfs/CPIWinter2006rev.pdf> .

### APR 29 2006

**Teaching with Writing Workshop II with Toby Fulwiler** The Writing Task Force is sponsoring full-day workshops for instructors from all faculties, programs, and departments. The workshops are an excellent opportunity to find out more about writing-intensive teaching, Writing-to-Learn, Writing-Across-the-Curriculum (WAC) and Writing-in-the-Disciplines (WID) from one of the world's leading experts. The workshops are free but registration is required. 9:00 a.m. - 5:00 p.m. Prairie Room Lister Hall . <http://www.arts.ualberta.ca/wtf/> .

**3rd Annual Arts Alumni Spring Tea** Join fellow Arts Alumna, Laurie Greenwood, and Dean Daniel Woolf to hear the latest faculty news and meet other Arts grads. 2:00 p.m. Maple Leaf Room, Lister Hall. <http://www.uofaweb.ualberta.ca/arts/nav03.cfm?nav03=40666&nav02=18646&nav01=18543> .

For complete University of Alberta job listings visit:  
**[www.hrs.ualberta.ca/](http://www.hrs.ualberta.ca/)**



## MAY 1 2006

**(UTS) Teaching Dossier** What is a teaching dossier and what kind of supportive documentation should it contain? Why are some University of Alberta departments placing greater importance on teaching dossiers? The aim of this workshop is to answer these questions and provide an opportunity for participants to start to create their own personalized dossier. 10:00 a.m. - 11:30 p.m. CAB 219. <http://www.ualberta.ca/uts>.

**(UTS) Microteaching for the IS Program** The Instructional Skills (IS) Program participants to demonstrate their teaching skills to peers. Participants with a minimum of 25 hours of pedagogy are invited to give a 10-minute microteaching presentation on a topic of interest to and understandable by a diverse audience. Presentations must be structured (introduction, body, conclusion) and rehearsed to fit the 10-minute time slot. If you wish your presentation to be videotaped, please bring a blank VHS tape. As this is a requirement of the IS Program, registration and attendance are compulsory. This IS Program Session requires five participants. 1:00 p.m. - 3:00 p.m. CAB 219. <http://www.ualberta.ca/uts>.

**Recruitment Seminar** Dr. Martin Srayko, Max Planck Institute for Molecular Cell Biology and Genetics, will present a seminar entitled "Regulators of microtubule behaviour in *C. elegans*: from systems to individual components". Dr. Srayko is a candidate for the Assistant/Associate Professor position in Molecular Genetics in the Department of Biological Sciences. Hosted by Dr. Dave Pilgrim. 4:00 p.m. - 5:00 p.m. M 145 Biological Sciences Building. [http://www.biology.ualberta.ca/news\\_events/](http://www.biology.ualberta.ca/news_events/).

## MAY 3 2006

**Benefits and Challenges of Student Placements (UTS)** Each year thousands of undergraduate and graduate students from sixteen Faculties and Schools within the University of Alberta participate in some form of experiential learning where professional work experience is closely integrated with their studies. A panel consisting of a student and representatives from University Administration, government, and a community agency will discuss some of the advantages and challenges of these student learning experiences. 9 a.m. - 10:30 p.m. ETLC 1-003. <http://www.ualberta.ca/uts>.

**Models of Student Engagement (UTS)** University of Alberta students currently have opportunities for experiential learning that include internships, cooperative placements, optional community service learning, and compulsory clinical placements. A multidisciplinary panel profiles the structure of different learning opportunities and discusses how such learning is designed, implemented, and monitored to achieve quality learning outcomes. 11:00 a.m. - 12:30 p.m. ETLC 1-003. <http://www.ualberta.ca/uts>.

**Using Journals: A Window to Your Teaching and Student Learning (UTS)** Experiential learning has been defined in terms of a learning model that begins with experience followed by reflection, discussion, analysis and evaluation of the experience. The assumption is that we seldom learn from experience unless we assess the experience, assigning our own meaning in discoveries and understanding. A journal can play a critical role in learning because it is a form of personal written record and response to experience. It is expressive writing that has been categorized as thinking and speculating on paper. Writing in a journal is a means of exploring one's thoughts and feelings, using writing to "know what one knows". This session will explore reasons and strategies for using journals as a window to your teaching and student learning. 1:30 p.m. - 2:30 p.m. ETLC 1-003. <http://www.ualberta.ca/uts>.

**Learning and Teaching Issues with Experiential Learning (UTS)** Whenever students engage in learning "off campus" there are logistical and pedagogical challenges that need to be addressed. A multidisciplinary panel discusses the issues they have faced in planning and implementing the learning experiences of their students. 3:00 p.m. - 4:30 p.m. ETLC 1-003. <http://www.ualberta.ca/uts>.

## MAY 4 2006

**Chemical and Materials Engineering Graduate Research Symposium - Engineering the Future** The Department of Chemical and Materials Engineering at the University of Alberta will be hosting its Second Annual Graduate Research Symposium on May 4, 2006. Organized by a dedicated group of chemical and materials engineering graduate students, you can count on seeing unique research projects. 8:00 a.m. - 5:00 p.m. Engineering Teaching and Learning Complex (ETLC). <http://www.uofaweb.ualberta.ca/cme/grs2006.cfm>

**Evaluating Student Learning in Off Campus Settings (UTS)** Charting the progress and growth of students within an experiential learning experience and evaluating student performance is an integral component of teaching. Assessing these learning experiences is often treated differently

from other forms of assessment. A multidisciplinary panel will share their evaluation strategies and the rationales for those strategies. 9:00 a.m. - 10:30 a.m. ETLC 1-003. <http://www.ualberta.ca/uts>

**Crafting a Learning Plan (UTS)** A learning plan is a mutual commitment between a student and an instructor. It is a "marrying" of course objectives with the student's learning needs and objectives, and may be a component of the evaluation process. In this introductory workshop we invite audience participation as we explore learning plans and how they might be used in experiential learning situations. 11 a.m. - 12 noon ETLC 1-003. <http://www.ualberta.ca/uts>

**Supporting Student Learning During Placements (UTS)** In any professional discipline, the field experience, as with the classroom experience, possesses its own unique challenges. Key to its success, however, is how well students are supported in their learning. The purpose of this workshop is to explore the teaching learning process within the context of the field setting and to examine strategies that can be used to best support the student in their experience. 1:00 p.m. - 2:30 p.m. ETLC 1-003. <http://www.ualberta.ca/uts>

**Future Collaborative Strategies for Experiential Student Learning (UTS)** Where might we go from here? Based upon the options and opportunities, the teaching strategies and challenges, and student reports a multidisciplinary panel will present their ideas and suggestions for future experiential learning opportunities. 3:00 p.m. - 4:30 p.m. ETLC 1-003. <http://www.ualberta.ca/uts>

## MAY 4 - 6 2006

**Canadian Summit on the Integration of Research, Teaching and Learning** The U of A is hosting the 2nd Annual Canadian Summit on the Integration of Research, Teaching and Learning. The conference will explore different aspects of the integration of teaching and research with the goal of improving the student learning environment within Canadian higher education. 3:00 p.m. - 5:00 p.m. Telus Centre and Education Centre. <http://www.ualberta.ca/summit>

## LEADING RESEARCH INTO THE FUTURE

Celebrating Recipients of the Canada Foundation for Innovation's New Opportunities Fund  
APRIL 19, 2006

The University of Alberta thanks the Canada Foundation for Innovation (CFI) for contributing to research excellence at the University through its New Opportunities Fund.

Congratulations to the 16 recent U of A recipients:

Erin Bayne	Kamaljit Kaur
David Bressler	Roger Moore
Jason Carey	Masahito Oba
David Coltman	Habibur Rahman
Lorraine Doepel	Paul Steenhuisen
Michael Dyck	Stephen Strelkov
Laurier Fagnan	Richard Thompson
Vincent Gaudet	Sunita Vohra

This marks the conclusion of CFI's New Opportunities Fund (NOF), which helped launch the careers of more than 3,000 new, talented faculty members at Canadian institutions since its inception in 1998. The NOF program has been replaced with the Leaders Opportunity Fund program—created to reflect Canada's fast-evolving research environment, and designed to give Canadian universities the added flexibility they need to both attract and retain the very best of today's and tomorrow's researchers at a time of intense international competition.



Your feet are the foundation of your body...

Foot Pain? Knee Pain? Back Pain?

Digital information and our physiotherapist's clinical exam are combined to make affordable prescription orthotics worn in your shoes, to correct many abnormal foot functions.

Clip this ad for a FREE computerized foot analysis

Call 431-1050 (valid until April 27, 2006)



University Physical Therapy  
Garneau Professional Centre  
#350, 11044 - 82 Ave.

Paul Lorieau's University Optical

FREE VISION TEST

with purchase of lenses or complete eye glasses

Conveniently located in College Plaza

11170 - 82 Avenue  
Edmonton, AB T6G 2L8

Wheelchair Accessible 433-5500

The world is waiting for you.  
What are you waiting for?

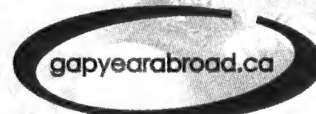
Take a Gap Year Abroad! Experience the world.

Travel CUTS has been offering independent travel options and specialized programs for over 35 years.

- work in a cafe in Australia
- volunteer to build a school in Costa Rica
- teach English in Thailand
- learn to speak Spanish in Madrid

WORK • VOLUNTEER • TEACH • LEARN • LIVE • PLAY

Senate Travel  
HUB Mall, U of A  
492-2756



[www.travelcuts.com](http://www.travelcuts.com)  
[www.swap.ca](http://www.swap.ca)  
[www.volunteerabroad.ca](http://www.volunteerabroad.ca)  
[www.studyingabroad.ca](http://www.studyingabroad.ca)

Travel CUTS is owned & operated by the Canadian Federation of Students. SWAP is a not-for-profit program of the Canadian Federation of Students and a division of Travel CUTS.

Focused on Value



Live.  
Like.  
Home.



SIGNATURE SUITES  
CAMPUS TOWER

From \$103\*

Please quote "UNV1" when making your reservation.

- Generous one and two bedroom suites with fully-equipped kitchens
- Executive floors
- Fully air conditioned
- Complimentary high speed Internet access
- One block from Edmonton's transit, rail network

\* Per night. Based on availability, plus applicable taxes. Valid until September 30, 2006.

11145—87 Avenue, Edmonton, Alberta T6G 0Y1  
Tel: 780.439.6060 Fax: 780.433.4410  
Email: [reservations@campustower.com](mailto:reservations@campustower.com)

[www.campustower.com](http://www.campustower.com)  
Toll Free Reservations 1.888.962.2522



## Faculty of Science Award Winners for

2005/2006

### Faculty of Science Award for Excellent Teaching

**Dr. Chien-Ping Paul Lu**  
Department of Computing Science

Dr. Chien-Ping Paul Lu joined the Department of Computing Science in January 1999 as an Assistant Professor. His appointment marked his return to the University of Alberta, his Alma Mater, after completing both his BSc (1991) and MSc (1993) in the Department of Computing Science. Paul obtained his PhD from the University of Toronto, where he studied parallel and distributed systems.

Although a relatively junior faculty member, Paul has distinguished himself as a talented and dedicated instructor. He draws upon his experiences as an undergraduate student and as a Graduate Teaching Assistant here at the University of Alberta for understanding how the different courses fit within the overall curriculum. His commitment to offering the best possible foundation in Computing Science is highlighted by his willingness to delay sabbatical leave in order to spend the time revising the curriculum for CMPUT 201, the core second year course that serves as the foundation for most of the senior courses.

Paul's students recognize and appreciate his teaching talent. He was nominated for, and won, the Students' Union "Recognizing Talented Teaching" Award in 2003. Regardless of the course level, the students regularly comment that he is the best professor they have had. The students appreciate that he engages them in the subject and challenges them intellectually.

In Paul's own words, the most important thing that he tries to impart to his students is "critical thinking skills". A key part of critical thinking is the ability to synthesize ideas that span multiple courses, topics, or chapters in the textbook. Through his brilliant teaching, his impeccable sense of honesty and fair play, and with his endless enthusiasm, Paul Lu helps his students to acquire the tools they need to be successful.

### Kathleen W. Klawe Prize for Excellence in Teaching of Large Classes

**Dr. John Vederas**  
Department of Chemistry

Dr. John Vederas is University Professor of Chemistry and a Canada Research Chair. He received his BSc from Stanford University and his PhD at the Massachusetts Institute of Technology. After postdoctoral work at the University of Basel and at Purdue University, he joined the University of Alberta in 1977.

He has received recognition for research and teaching, including the Rutherford Award for Undergraduate Teaching (1995), the University Cup (1998), the J. Gordin Kaplan Award for Research (2003) and the Killam Award for Mentoring (2003). He is a Fellow of the Royal Society of Canada (1997) and an Alberta Centennial Medal recipient (2006). He was awarded the Merck Award (1986), the John Labatt Award (1991), the R. U. Lemieux Award (2002) and the Alfred Bader Award (2005) from the Canadian Society for Chemistry for his research. He served in numerous scientific organizations, was President of the Canadian Society for Chemistry (2002-2003), and was a Member of Council at the Natural Sciences and Engineering Research Council of Canada (NSERC) (2001-2004). He is the author of over 200 research publications and 12 patents.

Dr. Vederas has taught many undergraduate and graduate courses, but he remains committed to teaching large sections of Introductory Organic Chemistry.

# positions

The records arising from this competition will be managed in accordance with provisions of the Alberta Freedom of Information and Protection of Privacy Act (FOIPPA). The University of Alberta hires on the basis of merit. We are committed to the principle of equity of employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons. With regard to teaching positions: All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. For complete U of A job listings visit [www.hrs.ualberta.ca](http://www.hrs.ualberta.ca).

## POSTDOCTORAL FELLOW IN LABORATORY MEDICINE & PATHOLOGY FACULTY OF MEDICINE & DENTISTRY

The Faculty of Medicine and Dentistry at the University of Alberta invites applications for a Postdoctoral Fellow in the Laboratory Medicine and Pathology Laboratory (start date to be June 1, 2006). The appointment will be for a two-year period.

The successful application will possess a PhD in an area related to genetics, molecular biology or biochemistry.

This individual will participate in projects that are both basic and translational research in nature in the area of Breast and Prostate Cancer Genetics and will involve:

- Identification of associations in gene polymorphisms / loci in case-control DNA samples, elucidation of genetic, molecular and biochemical mechanisms underlying breast and prostate cancers.
- Provide guidance for students and technologists
- Some supervisory responsibilities
- Work in a team environment
- Generate and test hypotheses

Requirements for this position:

- PhD in genetics, molecular biology or biochemistry and publications in a field relevant to the required skills
- Sophisticated expertise and considerable experience in molecular biology
- Understanding of the application of statistical analysis tools to molecular genetics
- Genotyping using high density Affymetrix SNP chips and fine mapping of loci using Pyrosequencing genotyping platform would be an asset, but not a prerequisite
- Knowledgeable in the application of techniques such as PCR, isolation of genomic DNA, cell culture, protein purification and immunoblotting
- Excellent interpersonal skills and ability to work in a team
- Capacity for independent pursuit of project
- Intellectual curiosity and initiative

For further information about this position, please contact the Principal Investigator,

Dr. Sambasivarao Damaraju ([sambasiv@cancerboard.ab.ca](mailto:sambasiv@cancerboard.ab.ca)).

Applicants are encouraged to submit curriculum vitae, brief descriptions of research interests and the names of three references (including contact information) to:

Femka Williams ([femkawil@cancerboard.ab.ca](mailto:femkawil@cancerboard.ab.ca))  
Cross Cancer Institute, Room 2244  
11560 University Avenue  
Edmonton, Alberta, T6G 1Z2

This competition will remain open until a suitable candidate is identified. All qualified applicants are encouraged to apply; however, Canadians and permanent residents will be given priority.

## BIostatistical ANALYST THE CANADIAN VIGOUR CENTRE, UNIVERSITY OF ALBERTA

The Canadian VIGOUR Centre at the University of Alberta is seeking applications for the post of a biostatistical analyst. The successful candidate should be able to work with large administrative and clinical trial databases and conduct statistical analyses to address clinical issues in consultation and collaboration with the centre's senior researchers. The candidate must have a Master's degree supplemented by strong training in statistical methods (such as logistic regression analysis and survival analysis). The candidate must be familiar with SAS and SPSS statistical packages and have proficiency in SAS and other statistical packages. Interested candidates should send a CV to Padma Kaul, 7226 Aberhart Ctr.1 or email [pkaul@ualberta.ca](mailto:pkaul@ualberta.ca).

## RESEARCH ASSOCIATE, LAB-ON-CHIP BIOTECHNOLOGY DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Our laboratory has a position available in a project of integrating life science and molecular biology protocols onto microfabricated devices. Our primary goal is the development of medical diagnostics. We seek a person with a PhD in an experimental field in the life sciences, natural sciences or engineering. Anyone with experience with the conventional techniques described below, and with an interest in their miniaturization, is a suitable candidate for the position.

This multi-year project is a vibrant collaboration between labs in the Faculties of Engineering and Medicine & Dentistry. The project involves the transfer of conventional life science protocols to microfluidic ("lab on a chip") devices. Most of this activity will take place in a laboratory that is jointly-operated by life science and engineering researchers. The position requires:

- A demonstrated ability to troubleshoot and think critically in an experimental environment.
- Good communication/interpersonal skills.
- The ability to work in a diverse interdisciplinary environment.
- Demonstrated experimental experience in biochemistry, biophysics, analytical chemistry or molecular biology, particularly in electrophoretic or other separation methods or in the development or troubleshooting of assays (chemical or biological).
- Demonstrated ability to productively direct one's own research, as well as that of others.

Applicants will have a PhD with a demonstrated record of productivity in an experimental area. The successful candidate will be a junior investigator and will participate fully in research and related scholarly activities. He/she will take a leadership role, work closely with the research team, mentor graduate students and manage long-term research projects to completion.

In order to apply, please send a cover letter and a CV that includes: 1) a list of research & development projects participated in, 2) a list of publications (please describe your role in each), and 3) the names and contact information of at least three references.

Please send these via email to:

Professor Chris Backhouse

Department of Electrical and Computer Engineering  
[chrisb@ualberta.ca](mailto:chrisb@ualberta.ca) with a carbon copy (cc) to [Krista@ece.ualberta.ca](mailto:Krista@ece.ualberta.ca)

Please also use the subject line of "ATTN: RA - Integration Position"

In case of difficulty in communications, please contact Krista at +1 (780) 492-8336.

Applications will be accepted until the position is filled. Salary will be commensurate with experience. All applications will be acknowledged.

## ASSOCIATE DIRECTOR, INFORMATION TECHNOLOGY RESOURCES AND SERVICES

The University of Alberta Libraries ([www.library.ualberta.ca](http://www.library.ualberta.ca)), Canada's second largest ARL library, and one of Canada's most technologically advanced research libraries seeks outstanding candidates for the position of Associate Director, Information Technology Resources and Services. The Associate Director will contribute personal vision and energy to ensuring that the Libraries form an active part of the University's aspirations for regional, national and international recognition. The incumbent will provide leadership in the vision, development and management of the Libraries' next-generation digital services environment and oversee the Information Technology Resources and Services Unit, including:

Providing leadership through the identification of technology-based applications that support improvements to library services and staff productivity and through participation in the Senior Administrative Team. Effectively planning, budgeting and allocating resources and implementing technology and applications in support of the vision, mission and goals of the Libraries, the Learning Services portfolio and the University. Supervising the Information Technology Resources and Services staff, consisting of five librarians responsible for operations, web development, digital initiatives, e-resources and licensing; and twenty technical/support and project staff. Ensuring that the Libraries' and Learning Services' interests are represented on campus-wide committees and activities related to technology.

Contributing to the highly collaborative environment within the province, the region and the nation.

The ideal candidate will have an accredited degree in library science, a minimum of seven years of progressive experience, including work in library systems and/or technology, and a successful track record of management/supervisory experience. We expect demonstrated success in facilitating and managing technology in research libraries and a strong understanding of technical applications. We expect a strong communicator with an avid interest in pursuing new directions in digital library services and in fostering innovation and team building.

This tenure-track position is classified at the Librarian 3 level with a current salary range of \$74,754-118,722. Librarians at the University of Alberta have academic status and participate in a generous benefits program. Closing date for applications is April 30, 2006.

To apply, please mail, fax, or e-mail your letter of application, résumé, and the names and addresses of three referees to:

Karen Adams  
Director of Library Services and Information Resources  
Cameron Library  
University of Alberta  
Edmonton, Alberta, Canada T6G 2J8  
Fax: (780) 492-8302  
Email: [karen.adams@ualberta.ca](mailto:karen.adams@ualberta.ca)

pathways to success

## SPRING & SUMMER STUDIES 2006

UNIVERSITY OF ALBERTA, EDMONTON

*"This is a very exciting time for the  
University of Alberta—a time of discovery."*

*"At no other time in history has information  
been so abundant, and knowledge so prized."*

Indira V Samarasekera, OC  
President and Vice-Chancellor

- ▶ Advance your professional development in specialized areas.
- ▶ Expand your horizons while studying abroad.
- ▶ Fast track your degree with a wide range of subjects and courses.
- ▶ Apply to take credit courses through Open Studies by April 30 or June 30.

Classes Begin:  
Spring Term—May 8  
Summer Term—July 10

Visit [www.registrar.ualberta.ca/springsummer](http://www.registrar.ualberta.ca/springsummer) for detailed information or pick up a copy of the 2006 Spring & Summer Studies guide from the foyer of the Administration Building.



UNIVERSITY OF  
ALBERTA



Ads are charged at \$0.65 per word. Minimum charge: \$6.50. All advertisements must be paid for in full by cash or cheque at the time of their submission. Bookings may be made by fax, mail or email provided payment is received by mail prior to the deadline date. Pre-paid accounts can be set up for frequent advertisers. Please call 492-2325 for more information.

## ACCOMMODATIONS FOR RENT

**REAL ESTATE** – Buy or Sell, Leases (furnished/unfurnished). Janet Fraser or Gordon W.R. King. Telephone: (780) 441-6441, [www.gordonwrking-assoc.com](http://www.gordonwrking-assoc.com) Gordon W.R. King and Associates Real Estate Corp.

**GREENVIEW FURNISHED SABBATICAL HOME**, cul-de-sac location. 3 bdrms on main and fully finished basement with artist's studio, two full baths. Peaceful and beautiful backyard. Immediate, long term lease available. Call Janet Fraser 441-6441 Gordon W.R. King & Assoc. Real Estate Corp. Email [jennfra@interbaun.com](mailto:jennfra@interbaun.com)

**CLARIDGE HOUSE** - 1 bdrm, 1 full bath, furnished. Immediate to June 30/06, \$1,250/mo. Call Janet Fraser 441-6441 Gordon W.R. King & Assoc. Real Estate Corp. Email [jennfra@interbaun.com](mailto:jennfra@interbaun.com)

**HENDERSON ESTATES** - Heath Road executive 2 storey, 4 bedroom, exquisite finishes, excellent floor plan, available June 1, 2006. \$2,000/mo. Call Janet Fraser for details 441-6441 Gordon W.R. King and Assoc. Real estate corp. Email [jennfra@interbaun.com](mailto:jennfra@interbaun.com)

**RIVERBEND -THE UPLANDS**, gorgeous executive condo in prestigious complex, gated community. Coach home style, 2000 sq ft on one level, 2 bdrms + den and 2 full baths, huge designer kitchen, formal dining room, large living room wood burning fireplace. Immediate possession, \$1500/mo includes all utilities. Call Janet Fraser 441-6441 Gordon W.R. King & Assoc. Real Estate Corp. Email

[jennfra@interbaun.com](mailto:jennfra@interbaun.com)

**HOLIDAY RENTALS MEDIEVAL HOUSE OR STUDIO APARTMENT** South of France near Montpellier (780) 433-9602, [salliejohnson@shaw.ca](mailto:salliejohnson@shaw.ca). **FURNISHED SABBATICAL HOUSE**: excellent, 3 bedrooms, 2 ½ baths, 2,500 sq. ft. Close to very good schools, airport, UofA, shopping, restaurants and other amenities. Blue Quill/Heritage area. July 06-July 07. (780) 435-0533, [peter.boxall@ualberta.ca](mailto:peter.boxall@ualberta.ca).

**GREAT HOUSE - EASY WALK TO U OF A & DOWNTOWN**, 4 bedroom character semi bungalow, hardwood floors, 2 full bathrooms, developed basement, single garage, fantastic location, 85th Ave 109th Street. Could rent basement separately, Sandy 991-6607.

**EXTRA LARGE CONDO IN STRATHCONA HOUSE** incl.: 2 bed, 2 bath, u-ground heated parking, pool and fitness room. Walking distance to UofA and close to downtown. \$1200/month includes utilities and parking. Call 450-4792.

**LORD STRATHCONA MANOR SASKATCHEWAN DRIVE**, deluxe 2 bedroom apartment, south west facing 2 balconies, spotless ten minutes walk to university. Available immediately. Call 438-6410.

**CONDO BEAUTIFULLY RENOVATED** – 2 bed, 2 bath, laundry lovely views close UofA. No smoking. No pets, \$990. Leslee Greenaway Professional Realty 477-7036.

**WELL FURNISHED NEW 2 BEDROOM CONDO IN THE CENTURY** on trendy, upscale 104 St. and 101 Ave. 1/2 block from LRT. Secure parking, gym;

balcony with barbeque; in-suite laundry; linens, kitchen acces. optional. May 1 - Aug. 31. \$1400/mo. plus dd. Ph. 973-5589.

**ATTENTION MD OR PHD** – 3 Bedroom condo – Fabulous River Valley view, Located at 117 Street and 100 Avenue (Victoria Drive) – Completely renovated. Just point your vehicle and roll down the hill to the university and the hospitals. \$1,950 per month with lease. Phone Esther (780) 483-4891.

**TWO BEDROOMS 2 BATHROOMS** quiet high-rise condominium adjacent to UofA. (Claridge House 11027 – 87 Avenue) 7 appliances, in-suite laundry, swimming pool (underground heated parking available), \$1,350/month includes utilities. Available August 1, 2006. Phone 430-6797.

## ACCOMMODATIONS FOR SALE

**GRANDVIEW** - executive 6 bedroom raised bungalow near university. Pictures and virtual tours at [www.comfree.com](http://www.comfree.com) Edmonton Code 5842. Call 436-2663.

## MISCELLANEOUS

**VICTORIA PROPERTIES**. Knowledgeable, trustworthy Realtor, whether you're relocating, investing or renting. Will answer all queries, send information, no cost/obligation. "Hassle-free" property management provided. Lois Dutton, Duttons & Co. Ltd., Victoria, B.C. 1 (800) 574-7491 or [lois@duttons.com](mailto:lois@duttons.com).

**THE RELIGIOUS SOCIETY OF FRIENDS (QUAKERS)**

meet Sundays at 10:30 a.m. at L'Arche, 7708 – 83 Street, Edmonton. Visitors Welcome. Visit <http://www.edmontonquakers.org> for more information.

## SERVICES

**CASH PAID** for quality books. Edmonton Book Store, 433-1781. [www.edmontonbookstore.com](http://www.edmontonbookstore.com)  
**ALWAYS WANTED TO BE A MARTIAL ARTIST?** Why wait another day? 2 for 1 Family Rates. Northern River Karate School 707-3693 [www.ThreeBattles.com](http://www.ThreeBattles.com)

**EDITING, PROOFREADING, AND WRITING SERVICES** 716-4242/473-2141 [typescript@interbaun.com](mailto:typescript@interbaun.com).

**ORGANIZER** – need someone to help you organize office, home or project? 716-4242/473-2141 [typescript@interbaun.com](mailto:typescript@interbaun.com).

**NEED SOMEONE TO WALK YOUR DOG? FEED YOUR CAT?** I mind your home, your pets Residential house/pet-sitting, pet care and pet taxi. Leave message with Mona @ 498-2917.

**TECH VERBATIM EDITING**, on campus. APA, Chicago, Hart's, MLA, Turabian; medical terminology. Member, Editors' Association of Canada. Donna 465-3753 [verbatimedit@shaw.ca](mailto:verbatimedit@shaw.ca)

**FRIENDLY NEIGHBOURHOOD PAINTING** - helping you improve your space. Eric Stiwich. Phone: 996-1935, Email: [ericstiwich@yahoo.ca](mailto:ericstiwich@yahoo.ca)

**LOOKING FOR A QUALITY PAINT JOB?** Call College Pro! Operating in Edmonton for 25 years, we offer quality work at affordable prices! Call 1-800-465-2839.

# notices

Please send notices attention Folio, 6th floor General Services building, University of Alberta, T6G 2H1 or e-mail [public.affairs@ualberta.ca](mailto:public.affairs@ualberta.ca). Notices should be received by 12 p.m. Thursday one week prior to publication.

## FSIDA (FUND FOR SUPPORT OF INTERNATIONAL DEVELOPMENT ACTIVITIES)

Application Deadline

The deadline for receipt of applications to the FSIDA is 4:30 p.m., April 18, 2006.

This fund exists to enable staff and graduate students of the University of Alberta to participate in the international transfer of knowledge and expertise and graduate research through partnerships in developing countries.

Applications and guidelines are available on

the University of Alberta International website [www.international.ualberta.ca](http://www.international.ualberta.ca) or from the FSIDA Secretary at University of Alberta International, 1204 College Plaza, 8215-112 Street, telephone 492-2391.

## INTERNATIONAL PARTNERSHIP FUND

The "International Partnership Fund" (IPF) was established to support University of Alberta faculty and staff participating in exchange activities with the university's many partner institutions around the world. The fund provides financial support to faculty and staff engaged in the development

and/or implementation of activities that contribute to sustainable and reciprocal relations with international academic partners. Awards may be used for travel by either the U of A staff/faculty member to visit an international partner, or for the faculty or unit to support a visitor from the partner. The fund favours activities that develop projects bringing an international focus to the academic, research and teaching mandate, and contribute to the internationalization objectives of the faculty.

Support from the IPF will ideally complement multiple funding sources. Matching support from

the individual and/or the department/faculty and partner institution is required.

Note: The IPF only applies to those institutions with which the U of A has a formal agreement.

For guidelines, application forms and list of eligible partner institutions, please visit the University of Alberta International website: <http://www.international.ualberta.ca>

For more information please call 492-5840 or e-mail: [ipf@international.ualberta.ca](mailto:ipf@international.ualberta.ca)

Application deadline: Monday, May 1st, 2006

# The Alberta Prion Research Institute is pleased to announce the results of its first funding call.

More than \$6 million has been awarded to seven top tier collaborative projects that involve researchers from across the province, Canada and around the world.

Congratulations to the following researchers and their teams:

## Core Projects Leaders

- Dr. David Coltman
- Dr. Ellen Goddard and Dr. Josephine Smart
- Dr. Stephen Moore
- Dr. David Wishart

## Proof-of-Principle Project Leaders

- Dr. Charles Holmes
- Dr. Brian Sykes
- Dr. Howard Young

Details of the research projects are available on the Prion Institute website.

## CALL FOR PROPOSALS: ALL DISCIPLINES

The Prion Institute has issued another call for Proof-of-Principle Projects. This funding program enables researchers working in any discipline to enter the field of prion research and supports new approaches into prion research.

**Applications must be submitted by May 19, 2006.**

**Application forms available online.**

ALBERTA PRION  
RESEARCH INSTITUTE

prion

AN INGENUITY INSTITUTE

The Alberta Prion Research Institute is a \$35 million government-funded initiative to support top researchers working on Alberta-based solutions to the serious scientific and socioeconomic challenges associated with prions, the proteins best known for their link to BSE.

[www.prioninstitute.ca](http://www.prioninstitute.ca)

SCIENCE WITH SOCIAL  
**IMPACT.**



# racing robots

## Mechanical engineering assignment challenges student know-how

Oh, there was a time when robots were the future. By now, they should have been at our beck and call, cleaning house or repairing the car, or protecting us from unimaginable threats.

While they aren't quite dedicated to our domestic bliss yet, robots are at work all around us. And a group of second-year mechanical engineering students recently put their own robotic creations to the test.

Professor Roger Toogood's MecE 260 students designed and built robotic devices capable of descending into a shallow valley, retrieving a weight, and climbing out of the valley within a specified time limit. Points were awarded according to the precision and speed with which robots performed.

Student teams sent their robotic vehicles to work, retrieving heavier weights after advancing to higher levels of competition.

The teams were all given the same parts kit and were permitted two hours of machinists' time, in the Mechanical Engineering department, to make specialized modifications to their parts. Their

project drawings had to meet professional engineering design standards. The project counts for 30 per cent of the students' final mark – five per cent for device performance, 25 per cent for project documentation.

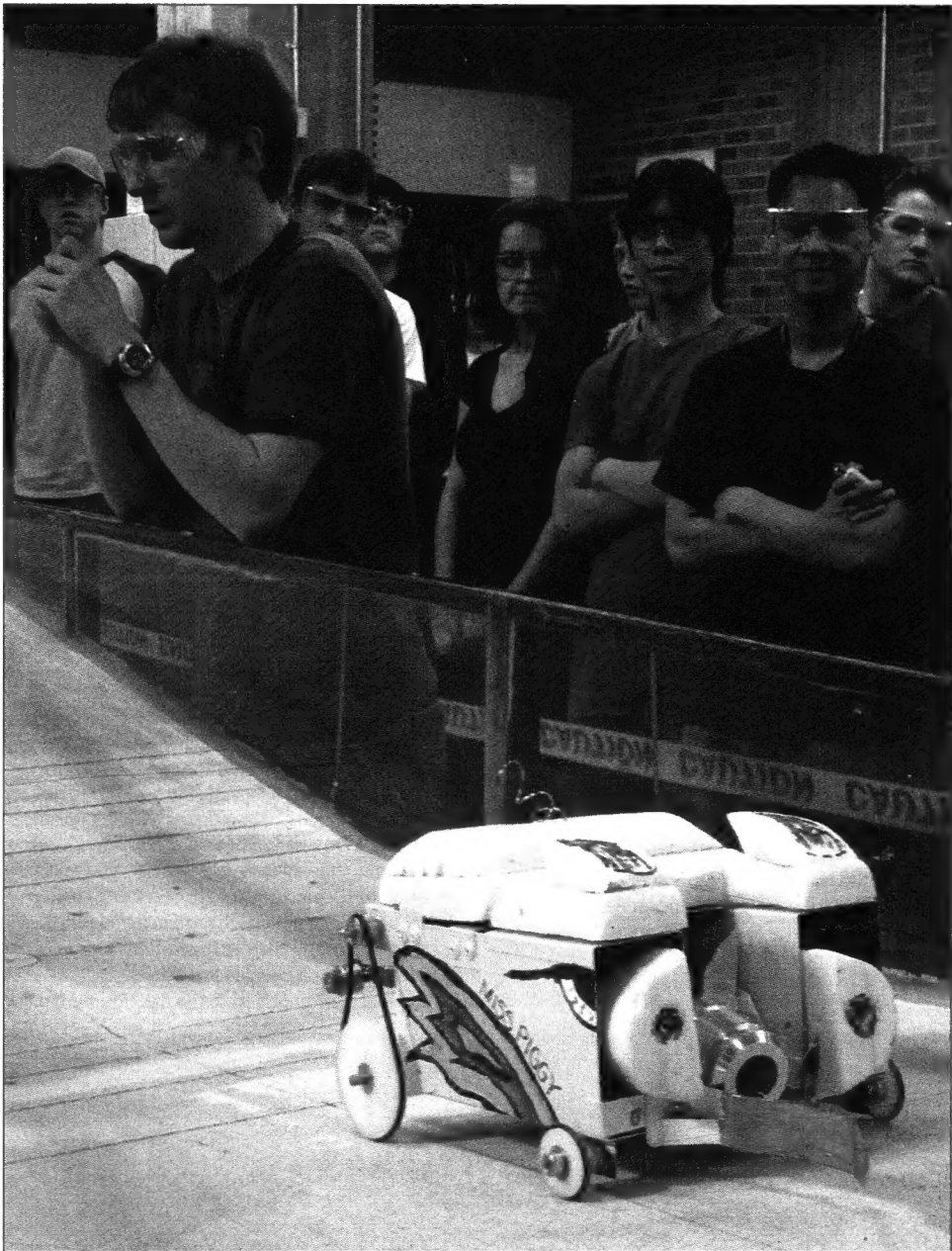
The winning entry, dubbed Miss Piggy, had a lot going for it, Toogood says.

"They had a simple design. Their frame was rigid so that steering was consistent," he said. "Their drive system had an adjustable tension drive belt, so they didn't have to worry about slipping. Their vehicle was light so that it would run the course quickly with no extra weight."

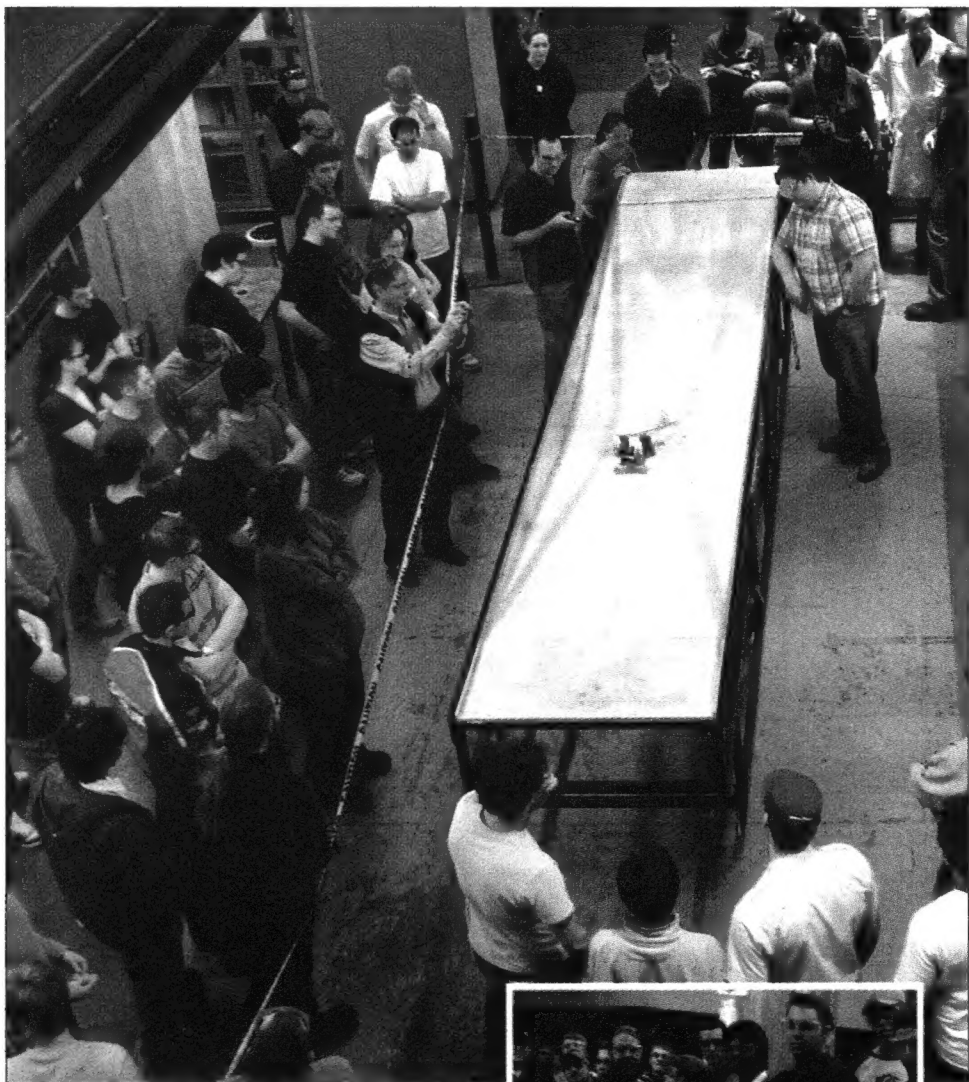
The Miss Piggy team members (Craig Maunder, Coy Schaub, Jason Meers, Peter Luchak and David Therrien) were able to fine tune Miss Piggy's performance times by adding or removing ballasts (dead batteries, which were listed in the parts kit).

There was one more important element contributing to the team's success. "I think they had fun," Toogood said. "They got along well as a group." ■

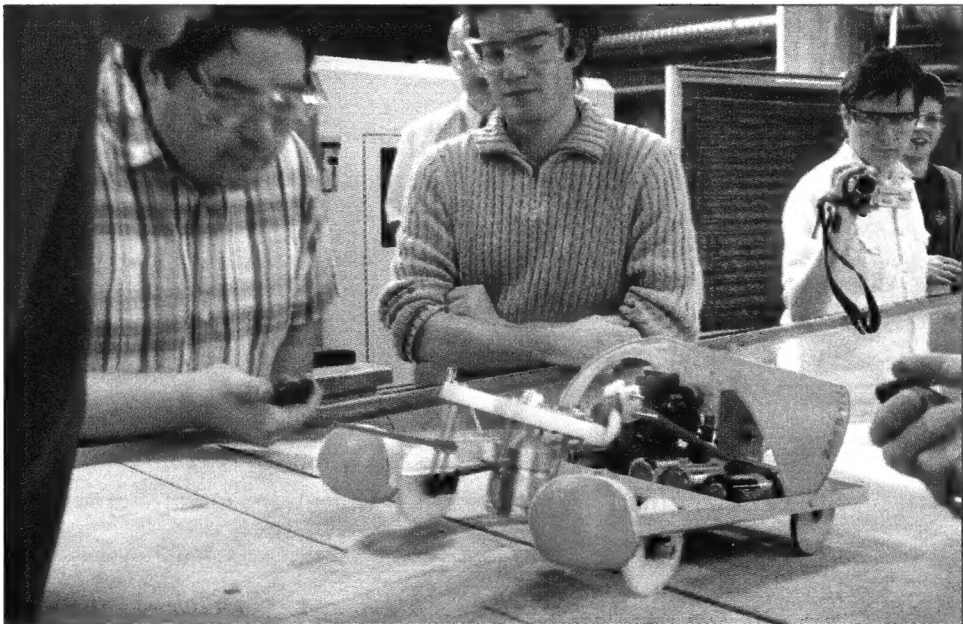
▼ Winning entry Miss Piggy picks up its cargo.



Photos: Matt Ferguson



▲ Robots always draw a crowd, as evidenced in this bird's-eye view of the competition.



▲ Innovation was not restricted to mechanics. The design of Andrew Browne, Kim Carlson, Michael Dawson, Graham Ferguson, and Roberto Martinez featured a hot-pink colour scheme, difficult to miss. At left, one team's entry had an entertaining, if not intimidating, theme.

folio **back**  
page